TECHNOLOGY DEPARTMENT

NEW EQUIPMENT DIGEST

A PENTON PUBLICATION

EQUIPMENT • IMPROVEMENTS • PROCESSES • MATERIALS • METHODS • APPLICATIONS • LITERATURE

Vol. 13 December, 1948 No. 12

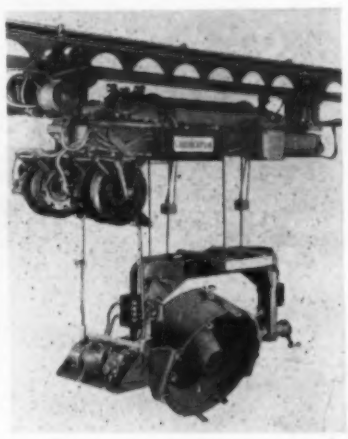
PUBLIC LIBRARY
DEC 9 1948
DETROIT

HAND TACHOMETER

Compact, lightweight, portable and extremely accurate model No. 4800 hand tachometer is of mechanical centrifugal type and indicates speed in either direction of rotation. Three ranges are included in single instrument to furnish speed indications from 50 to 50,000 revolutions per minute or 25 to 25,000 feet per minute. Range is selected by rotating knob marked 'low, medium, high.' Pointer remains at measured speed indication until it is returned to zero by means of pushbutton. Standard equipment includes driving tips and peripheral wheel for measuring surface speeds, and instrument case. Made by **Jones Motrola Corp.**, 439 Fairfield Ave., Stamford, Conn.

▲ Mention Item **NED-8900** when writing ▲

AUTOMATIC CHIP CARRIER



Baskets of metal chips can be transported from oil extractor to storage bunkers, emptied, and returned automatically by means of overhead chip-handling carrier. All operations are controlled by one man who remains at extractor. Baskets of approximately 15-cubic foot capacity which take 1000-pound loads are transported at speed of 200 feet per minute and turned over automatically. Dial selector permits dispatching load to any one of up to 400 stations. Carrier will not travel unless basket grab is in elevated position. Three motors serve hoist, carrier travel and basket roll-over. Made by **Cleveland Crane & Engineering Co.**, 1143 E. 283rd St., Wickliffe, O.

▲ Mention Item **NED-8901** when writing ▲

Do YOU know

■ SHINE on your last year's suit may be a thing of the past because of new liquid named "Killshine." Containing no acids or abrasives, this fluid can be used on all materials ranging from fine rayons to hard serge. It is colorless, noninflammable and leaves no odor. Glass container has hand applicator for ease of use. Made by Vitatex Products Corp., RKO Bldg., New York, N. Y.

▲ Mention Item **NED-8902** when writing ▲

■ MECHANICAL vibration is translated into audible or visual signals with new mechano-electronic triode transducer which is claimed to be the first commercial device of its kind. Smaller than a cigarette and weighing 1/16-ounce, this electron tube is capable of measuring vibrations as delicate as those caused by a fly walking on a steel beam or those of a remote earthquake. Its laboratory and industrial uses are practically endless. Made by Radio Corp. of America, Tube Dept., Camden, N. J.

▲ Mention Item **NED-8903** when writing ▲

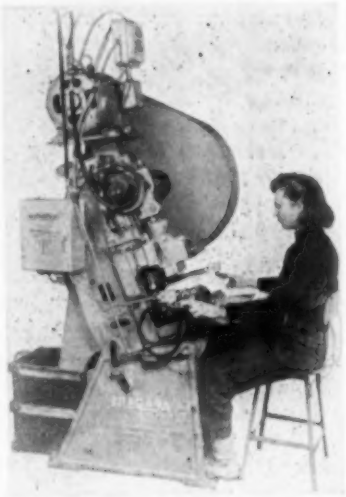
■ ANYONE who has struggled with a broken or jammed zipper will be interested in the Glenzip repair set which consists of three plier-like tools. They will remove damaged or jammed slides, open slide if fabric is caught, open new slides to replace broken ones, install top and bottom stops, replace broken teeth, remesh any slide fastener, tighten loose teeth and replace slide for smooth zipping. Kit has list price of $34.50. Made by Glenzip Co., 216 N. Clinton St., Chicago, Ill.

▲ Mention Item **NED-8904** when writing ▲

IT'S A SIMPLE MATTER

To get additional data on products in this issue. Just check desired number on postpaid inquiry slip between pages 4-5 or 68-69, sign it and mail.

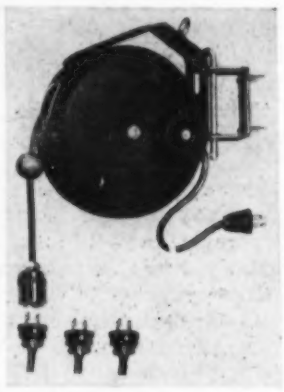
SAFETY CONTROL SWITCH



Easy to operate Microtrip electrical control switch mechanism provides for safe operation of punch presses, riveting machines, shears, spot welders and air presses. Both hands of operator are out of hazard area while press ram is in motion because both switch buttons must be touched simultaneously in order to actuate tripping mechanism. If an attempt is made to tie down either of the switches, trip mechanism becomes inoperative. Microtrip switch requires from 10 to 18 ounces pressure for actuation. Entire unit consists of two Micro precision switches and necessary tripping mechanism. It can be installed easily on existing equipment. Made by Micro Switch Div., **First Industrial Corp.**, 205 S. Chicago Ave., Freeport, Ill.

▲ Mention Item **NED-8905** when writing ▲

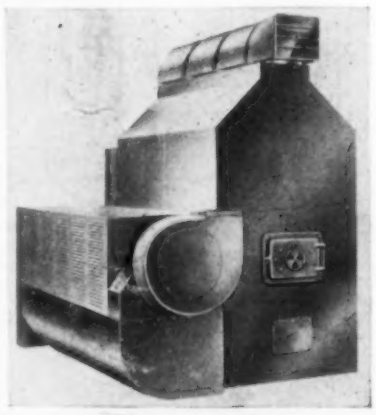
ELECTRIC CORD REEL



Now available equipped with Hubbell Twist connector, Cordomatic reel is suitable for supplying power to portable electric tools and other electric equipment in industrial plants. It is supplied complete with three male connectors as shown. Reel can be anchored to ceiling, ready for use, within 10 minutes. It can also be placed on any flat surface for use as portable unit or mounted permanently on wall. Reel will revolve freely through 360-degree arc to direction of pull when ceiling mounted, through 180 degrees when permanently mounted, or it can be locked in any of three fixed positions. Sizes are available holding 20, 25, 40 or 50-foot length of electric cable. Made by **Vacuum Cleaner Corp. of America**, Cordomatic Div., 76 W. Chelten Ave., Philadelphia 44, Pa.

▲ Mention Item **NED-8906** when writing ▲

SPACE HEATER



This basically coal-fired warm air space heater can be converted easily for firing with gas or oil. Incorporating stainless steel combustion chamber, heater is available in models with output capacities of 1,250,000 and 1,500,000 British thermal units per hour. Coal consumption for first output is approximately 133 pounds per hour.

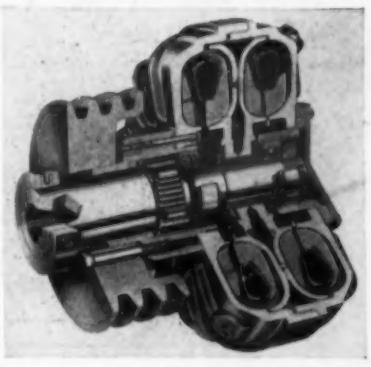
Air is drawn into base of heater, passed over tubes and combustion chamber and discharged through overhead nozzles. Heater can be used with or without ducts and can be adapted to bring in and heat outside air. It is usable also for summer ventilating or for process drying and curing. Blowers and induced draft fan are mounted on one shaft, and power is provided by single motor. Room temperature thermostats automatically control operation of fans and stoker. Made by **Dravo Corp.**, Dravo Bldg., 300 Penn Ave., Pittsburgh 22, Pa.

▲ Mention Item **NED-8907** when writing ▲

Read Carefully
CHECK AND PASS ON

✓	NAME AND TITLE	SEE ITEM NO.

SMALL HYDRAULIC DRIVE

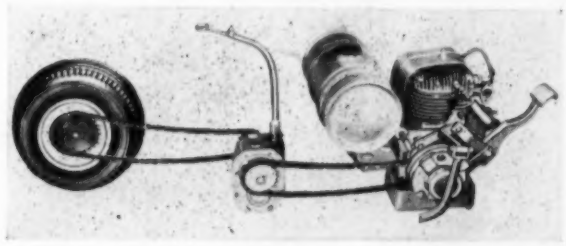


Developed for use on small electric motors and internal combustion engines, this Hydro-Sheave drive is hydraulic conversion device and is available for attachment to power output units rated from ¾ to 25 horsepower. It consists of small Twin Disc hydraulic coupling and sleeved shaft which slides over output shaft of power source. Oil is only medium of power transmission. Incoming power rotates coupling inner member, and blades force oil against vanes of coupling outer member. Drive is assembled and installed easily, and it will not stall, does not transmit shock loads and provides smooth and rapid acceleration. Made by **Twin Disc Clutch Co.**, Hydraulic Div., Rockford, Ill.

▲ Mention Item **NED-8908** when writing ▲

GASOLINE POWER UNIT

This power unit is designed for use in tractors, work trucks, scooters and similar equipment. It consists of Husky heavy-duty 4-cycle single-cylinder air-cooled gasoline engine which develops 4 horsepower at 3200 revolutions per minute, manually-operated positive-action disk type clutch, and sliding-gear transmission. Transmission has two speeds forward and one reverse. Speed reduction in low is 2.24:1 and in high is 1:1. Shifter arm permits quick selection of high, low or reverse gear. Through use of standard sprockets, various speed reductions with maximum of 33:1 in low are obtainable. With special sprockets, greater reduction can be achieved. Made by **Cushman Motor Works, Inc.**, Lincoln 1, Nebr.



▲ Mention Item **NED-8909** when writing ▲

In This Issue

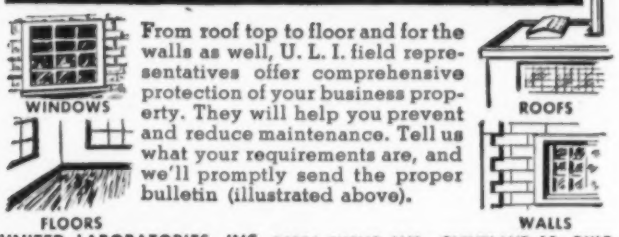
EDITORIAL CONTENTS—

New Equipment ..... Pages 1-56, 72
New Processes and Materials ..... Pages 57-59
New Literature and Catalogs ..... Pages 60-67

INDEXES—

Advertisers' Index ..... Pages 68-69
Product Index ..... Pages 70-71

TAKE THE *First Step* IN *REAL* PROPERTY PROTECTION



From roof top to floor and for the walls as well, U. L. I. field representatives offer comprehensive protection of your business property. They will help you prevent and reduce maintenance. Tell us what your requirements are, and we'll promptly send the proper bulletin (illustrated above).

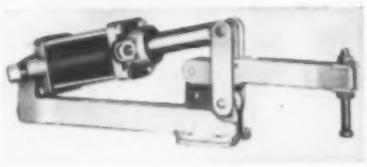
UNITED LABORATORIES, INC., 16804 EUCLID AVE., CLEVELAND 12, OHIO

PRODUCTS AND PROCESSES for PROTECTING PROPERTY

Field Representatives All Over The World

▲ Mention Item **NED-8910** when writing ▲

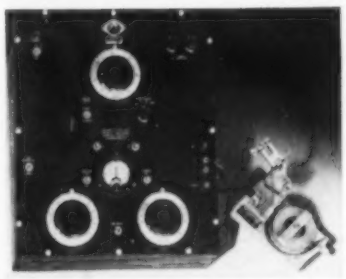
AIR-OPERATED CLAMP



Because it will not release clamped work if air pressure fails, model AO-400 air operated clamp provides safe means for securing parts for machining, assembly or other work. Clamps can be used singly or in multiples and actuated individually, in sequence or simultaneously. Pneumatic cylinder actuated toggle mechanism has clamping pressure up to 400 pounds and remains locked until air pressure is applied to open it. Cylinder, which is available separately, has 1½-inch bore and 2⅜-inch stroke and operates on up to 250-pound per square inch air pressure. Made by **Lapeer Mfg. Co.**, 3058 Davison Rd., Lapeer, Mich.

▲ Mention Item **NED-8912** when writing ▲

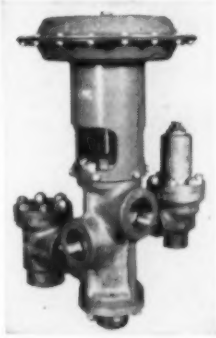
MAGNETIC TEST SET



Magnetic materials in laminar form can be tested quickly and economically by means of this type 1670-A test set. Measurements of permeability and core loss are made at 60 cycles and at low levels such as are encountered in inductors and transformers used in communication systems. Test sample can be single lamination or few duplicate strips in parallel. Measurements of inductance and loss of solenoid surrounding sample are made on Maxwell bridge which is clamped in test yoke. Accuracy of absolute measurement depends upon precision with which specimen cross-section is known. Made by **General Radio Co.**, Massachusetts Ave. & Front St., Cambridge 39, Mass.

▲ Mention Item **NED-8913** when writing ▲

DUAL-PRESSURE VALVE



Two-pressure Valv-Trol hydraulic valve is an assembly of three independent valves each of which can be installed in position most suitable for simplified piping. Unit can be installed also as complete assembly. Valve will operate on either oil or water systems. Low pressure, from 100 to 700 pounds per square inch, is admitted to main or three-way valve through hydraulic angle check valve. High pressure, up to 3500 pounds per square inch, is introduced through either automatic inlet or through diaphragm controlled valve. Skirted inner valve provides gradual change in rate of flow to eliminate shock.

Other valves in V-T line include three-way hydraulic units for operation on pressures up to 3500 pounds per square inch, balanced two-way hydraulic valves, automatic high pressure inlet valves and hydraulic angle check valves. Made by **Valv-Trol Co.**, Hill St., Akron 8, Ohio.

▲ Mention Item **NED-8914** when writing ▲

Get *ACCURATE* Control of Floating Voltage with POWER EQUIPMENT Battery Chargers

You can increase battery life, reduce maintenance and supervisory costs with simple, compact Power Equipment Battery Chargers. They give you accurate control of floating voltage . . . within ±1% . . . entirely eliminating the life-absorbing effects of over- or under-charging. And they're fully automatic in operation . . . electronically or magnetically controlled and regulated . . . designed to provide dependable, efficient, trouble-free charging at lowest possible cost. Write for full details.

POWER EQUIPMENT *Company*

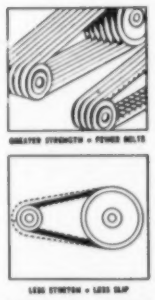
Specialists in Controlled Rectifiers Since 1935

55 ANTOINETTE ST. / DETROIT 2, MICHIGAN

▲ Mention Item **NED-8916** when writing ▲

BROWNING *STEEL CABLE* GRIPBELTS

MORE *Strength* • LESS *Stretch*



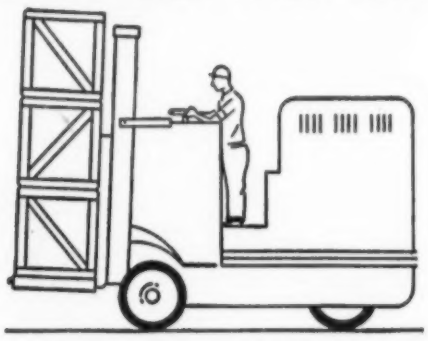
Browning Steel Cable Gripbelts are much stronger than ordinary belts. They will safely carry heavier loads with fewer belts. They will stretch less and give longer life without loss of power and efficiency.

Write FOR LIST PRICE SHEET V-163-A

BROWNING MANUFACTURING CO.
INCORPORATED
MAYSVILLE, KENTUCKY

▲ Mention Item **NED-8917** when writing ▲

where ton miles count most...



...you're ahead with

MONARCH

INDUSTRIAL

SOLID TIRES

Carefully designed and engineered by specialists, Monarch Industrial Solid Tires are built with the idea of giving maximum service at minimum cost. They are available in a variety of special types to meet the requirements of special applications. Thousands of Monarch Industrial Solid Tires are used every month as original equipment by leading manufacturers of industrial vehicles.

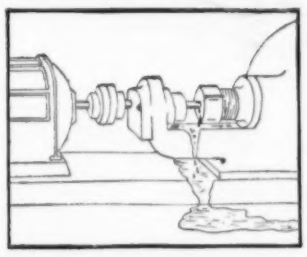
Replacement tires available through the manufacturer of your equipment. Immediate delivery on most popular sizes.

THE MONARCH RUBBER COMPANY • HARTVILLE, OHIO

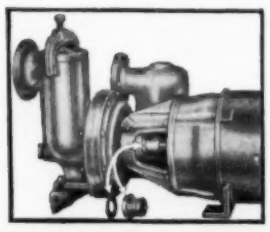
Specialists in Industrial Solid Tires
Manufacturers of Molded Mechanical Rubber Goods

▲ Mention Item **NED-8911** when writing ▲

TROUBLED WITH LEAKY STUFFING BOXES on Your Pumps?



Try *SYNTRON* MECHANICAL SHAFT SEALS *the next time!*



Simple and easy to install

Self-lubricating

Standard seals for handling clean water, refrigerant gases, oil, etc. Special seals for corrosive and abrasive liquids.

Write for illustrated catalog folder

SYNTRON CO., 405 Lexington, Homer City, Pa.

▲ Mention Item **NED-8915** when writing ▲

You Can SEE AROUND CORNERS

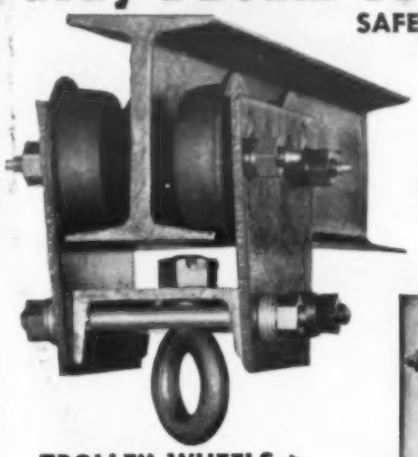
For greater inspection efficiency — see around all corners with a set of precision-made C-MASTER Inspection Mirrors. Easily turned all-angle 360° Ball Joints . . . mirrors stay firmly in position until re-angled. In varied shapes and sizes to meet all job conditions. Replaceable mirrors. SEND ORDER TODAY! WRITE FOR BOOKLET!

ULLMAN PRODUCTS CORP.
ULLMAN BLDG. Dept. N12 B'KLYN 15, N. Y.

▲ Mention Item **NED-8918** when writing ▲

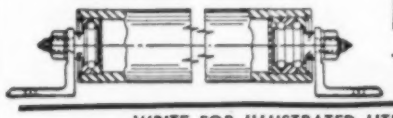
Gray I-Beam Trolleys

SAFE—EFFICIENT



Close Headroom
¼ to 5 ton Capacity
Adjustable For Any Type Beam
IMMEDIATE DELIVERY

TROLLEY WHEELS→
Plain or Flange Type
Single or Double Ball Race
Thoroughly Sealed



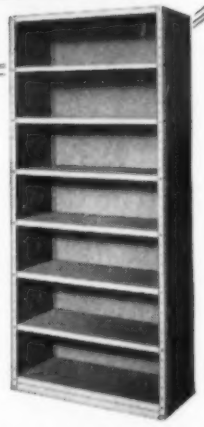
←GRAVITY ROLLERS
From 2¼" dia. up
Specify Length

WRITE FOR ILLUSTRATED LITERATURE

GRAY HUB COMPANY
INCORPORATED 1922
17265 GABLE AVENUE DETROIT 12, MICH.

▲ Mention Item NED-8919 when writing ▲

Prompt Delivery



on TRI-STATE STEEL SHELVING
√ We Furnish the Steel
√ At Competitive Prices

The Unit No. 12-A, illustrated at the right, consists of the following parts:
Four—84" posts
Two—12" x 84" end panels
One—36" x 84" back
Eight—12" x 36" shelves with label holders
One—Front base
Necessary nuts and bolts

Dividers can be furnished to make the Unit No. 12-A into any type of parts bin. All shelves are 18 gauge prime steel, backs and sides are 20 gauge prime steel, and posts are 13 gauge prime steel. Any of above parts may be purchased separately. Units are packed in individual cartons for safe shipping.

AVAILABLE IN 12", 18", 24" AND 36" SHELF DEPTHS

TRI-STATE Open Shelving—Posts (84") and shelves (12", 18", 24" or 36" deep) may be purchased separately to build your own open shelving. Materials are same gauge as for Closed Bin Type.

TRI-STATE METAL PRODUCTS, INC.
Box 1513 Pittsburgh 30, Pa.

▲ Mention Item NED-8920 when writing ▲

on one application—
RELIANCE RINGS SAVE .736 LB. OF STEEL . . . CUT MACHINING TIME

Machining this shouldered shaft from a solid 1⅝" annealed A.I.S.I. C1060 bar requires removal of .736 lb. of steel—a time consuming machining operation.

It can be made in a few seconds by machining a groove .045" deep in a polished 1.378" bar and slipping a Reliance Snap Ring into place.

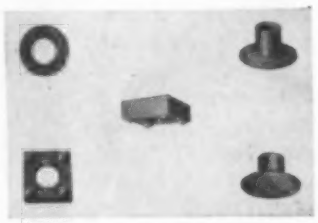
No metal is wasted; no polishing or grinding required. No heat treating is needed since the ring is already hardened. Shear strength of the assembly is 57,000 lbs. Reliance Rings do everything the machined shoulder does while saving material and time.

Write for folder showing other cost-cutting Reliance Ring applications.

Reliance Division
EATON
EATON MANUFACTURING COMPANY
Offices and plant: MASSILLON, O.
SALES OFFICES: NEW YORK • DETROIT
CLEVELAND • CHICAGO • ST. LOUIS
SAN FRANCISCO • MONTREAL

▲ Mention Item NED-8921 when writing ▲

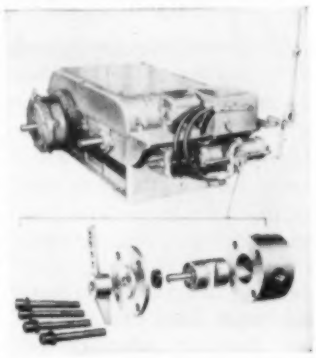
WELD BOSSES



Anchored to sheet metal housings by projection welding, Ohio weld bosses can provide bearings for shafts or push rods, act as spacers or separators to impart rigidity, or increase thickness of metal so that hole can be punched and subsequently tapped to receive bolts or screws. Bosses are available in thicknesses ranging from $\frac{1}{16}$ to ¾-inch and in round, square and flanged shapes. Round and flanged types can be supplied in low carbon steel, brass or 18-8 stainless steel, and square bosses are available in low carbon steel or brass. Made by **Ohio Nut & Bolt Co.**, 608 Front St., Berea, O.

▲ Mention Item NED-8922 when writing ▲

HYDRAULIC CONTROL VALVE



When applied to hydraulic-controlled Reeves variable speed transmission, rotary type valve permits automatic speed regulation for synchronization of different machines or separate sections of single machine as well as maintenance of uniform peripheral winding speed, pressure, weight, liquid level, temperature and other variables. Valve is actuated by only 4 ounces pressure. Rotary ball bearing design permits use of tight fitting, cup type oil seal which prevents oil leakage around valve stem.

Valve is furnished on new Reeves transmissions and is available for installation as replacement on those in service. Only two sizes are required to fit all transmissions. Made by **Reeves Pulley Co.**, 1000 N. Wilson St., Columbus, Ind.

▲ Mention Item NED-8923 when writing ▲

SELF-ALIGNING BEARINGS

Micrometer type Microlock adjustment is now standard on all Shafer self-aligning roller bearing units which include cartridge, pillow block, take-up and flange types. This design permits accurate bearing adjustment to within 0.005-inch. Three drilled counterbored holes in housing are spaced 30 degrees apart. Bearing cover has four milled keyways spaced 90 degrees apart. Cover is rotated by means of spanner wrench or screwdriver to desired position and held positively by self-tapping screw and key. Other features include Z-seal which excludes dirt and retains lubricant. Made by **Shafer Bearing Corp.**, 1412 Washington Blvd., Chicago 7, Ill.

▲ Mention Item NED-8924 when writing ▲

Multi-Pic
—THE FIRST REAL IMPROVEMENT IN WELD HAMMERS

NOW EQUIPPED WITH Repeater Brush

THAT WEARS AND WEARS AND WEARS AND WEARS

Five separate tool steel pic points are locked between free floating guide plates to permit each pic to adjust instantly to any convex, concave or irregular weld surface. Cleans quickly, easily, completely with one-fifth the time and effort.
Repeater Brush whisks away loosened slag, oxides and rust in a jiffy; reaches into deepest corners and crevices. Provided with quick, simple adjustment to compensate for wear.
Two Models: double 5-pic pointed ends or dual 5-pic and 25-pic pointed ends as illustrated with or without Repeater Brush.
Extra brushes 3 in a carton.

ORDER FROM YOUR DEALER TODAY
If he cannot supply you, write direct for descriptive folder and name of nearest dealer.
Patents Pending

BERNARD WELDING EQUIPMENT CO.
741-743 East 71st Street • Chicago 19, Illinois

▲ Mention Item NED-8925 when writing ▲

HUBER
• 20 YEARS SPECIALIZED EXPERIENCE

SPROCKETS and GEARS
• SPECIAL SPROCKETS MADE TO YOUR ORDER

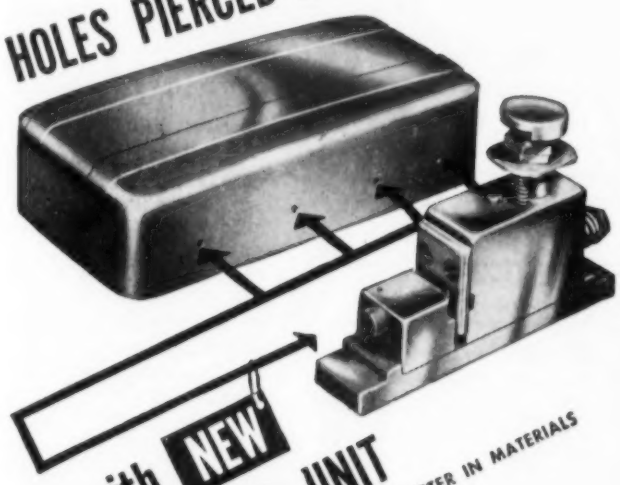
STOCK SPROCKETS

We have the answers to your sprocket and gear problems—Roller and Silent Chain Sprockets; Spur and Spiral Gears. Phone, Write or Wire for Huber Personalized Service.

HUBER GEAR & WHEEL CO.
Phone Des Plaines 901
1208 Harding Ave., Des Plaines, Ill. (Chicago Suburb)

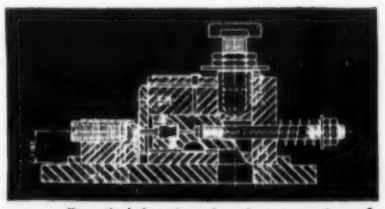
▲ Mention Item NED-8926 when writing ▲

HOLES PIERCED AT 90° ANGLE . . .

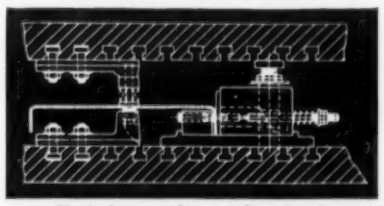


with NEW WHISTLER UNIT
PERFORATES HOLES UP TO ½" IN DIAMETER IN MATERIALS TO 1/16" THICK MILD STEEL

DETAILS EXPLAINED IN CATALOG NO. 47
Get the facts about this 90° perforating unit in a hurry. Your copy of this catalog will be sent at once upon request.



Detailed drawing showing operation of HU-50 90° Perforating Unit.



Typical set-up shows 90° perforating unit operated in conjunction with standard perforating equipment.

Extruded shapes, ells, angles and other molded, shaped or fabricated pieces are easily pierced from the side at 90° with HU-50 Perforating Units. Quickly set up and adjustable, these units may be used separately or with standard perforating equipment. The advantages provided by other Whistler Adjustable Dies are retained.

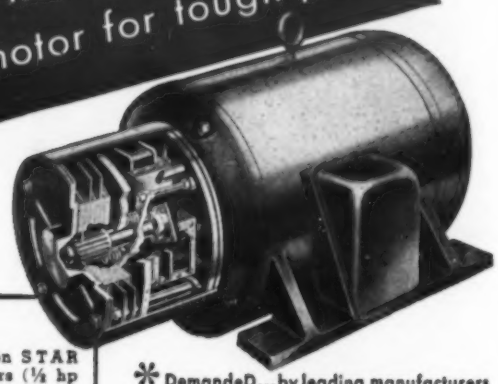
Absolute accuracy is assured. Quick change-over of tooling arrangements can be made . . . in many cases, on the press. Production economies and speeded up operating schedules are effected. Continuous re-use of units in different groupings spreads initial cost.

It makes sense to look into the use of Whistler Adjustable Dies for all perforating, notching, slitting or rounding operations.

S. B. WHISTLER & SONS, INC.
750 MILITARY ROAD
BUFFALO 17, NEW YORK

▲ Mention Item NED-8927 when writing ▲

The STAR BRAKEMOTOR is the best d------d* motor for tough jobs!



Full data on STAR Brakemotors (½ hp to 60 hp)... and how they perform on tough "start and stop" jobs... are found in STAR's new Brakemotor Bulletin. Write for your copy.

*DemandeD...by leading manufacturers of materials-handling equipment where motors must stand up under a daily beating from heat, cold, shock and strain... and be depended upon to "start and stop" loads with split-second timing—and minimum maintenance.

Star Electric Motor Co.
Standard and Special Motors
214 Bloomfield Avenue, Bloomfield, New Jersey

▲ Mention Item NED-8928 when writing ▲

FLOATLESS
MAINTENANCE-FREE
LEVEL CONTROL

UNLIMITED LIFE
No Moving Parts to Wear Out.

SAFETY
Low Voltage in the Probe Circuit.

MAINTENANCE-FREE
No Vacuum Tubes.

SIMPLICITY
No Floats, Seals, or Moving Elements.

OPERATION
Two probe rods reach into the tank to the levels where pump-on and pump-off operations are required. Actual contact of the probes with the liquid operates Photoswitch Control which makes and breaks the pump-control circuit.

PHOTOSWITCH Level Controls, effective for all conductive liquids, are available for single-level indication or control, on and off pump control, and boiler feedwater control.

▲ Write today for Level Control Bulletin PF479NED ▲

PHOTOSWITCH INCORPORATED
PHOTO-ELECTRIC & ELECTRONIC CONTROLS FOR EVERY INDUSTRIAL PURPOSE
CAMBRIDGE, MASS. · District Offices IN ALL PRINCIPAL CITIES

▲ Mention Item NED-8929 when writing ▲

A Big Step Forward!
All-Metal
CHROMALOX
Radiant Heaters
for DRYING, CURING BAKING & PREHEATING

• Efficient • Flexible • Dependable

CHROMALOX Electric Radiant Heaters are ideal for drying, preheating, baking, curing and similar processing. Units operate efficiently in low and high ambient temperatures, give uniform heat without hot-spots and provide glareless radiation in wave lengths absorbed efficiently by all colors, textures and surfaces.

CHROMALOX Radiant Heaters withstand shock, vibration, moisture and dust. Units come complete, ready to install as individual heaters or they may be interlocked to form banks, tunnels, ovens, etc.

Ask for Bulletin CS-603
It suggests applications for compact Chromalox Radiant Heaters, including technical details.

EDWIN L. WIEGAND CO., 7509 THOMAS BLVD., PITTSBURGH 8, PA.

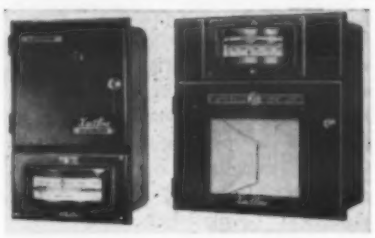
See other advertisement on page 52

CHROMALOX 18-79

ELECTRIC HEAT FOR MODERN INDUSTRY

▲ Mention Item NED-8930 when writing ▲

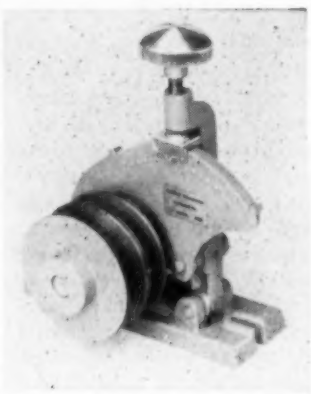
TEMPERATURE CONTROLS



Means for indicating, recording and controlling temperatures are provided by Xactline - Capacitrol and Exactline-Capacilog instruments which combine conventional pyrometer control features with auxiliary devices for maintaining precision straight-line temperature control. Either unit can be applied readily to any electrically heated or fuel fired oven or furnace equipped with motor-operated or solenoid valve. Variations above or below control point setting are held to minimum because of sensitive "anticipating" action. Made by **Claud S. Gordon Co.**, 3002 S. Wallace St., Chicago 16, Ill.

▲ Mention Item NED-8931 when writing ▲

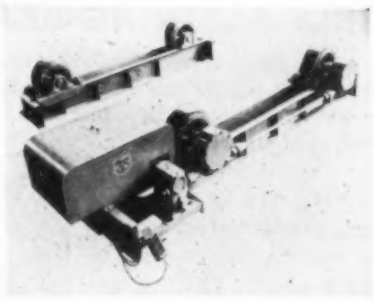
VARIABLE SPEED DRIVE



Comparatively low-priced CUB variable speed transmission is designed for use with A-section V-belts on applications requiring 3.3:1 speed range. Hardened and ground shaft rotates on sealed double ball bearing assembly. Two outer pulley flanges are fixed to rotating shaft with center pulley floating laterally on bronze bushing. Base dimensions are 2¾ x 7½ inches, and height is 9 inches. Speed adjustments are made by means of lever while machine is in operation. Price is $18.50. Made by **Standard Transmission Equipment Co.**, 80 W. Union St., Pasadena 1, Calif.

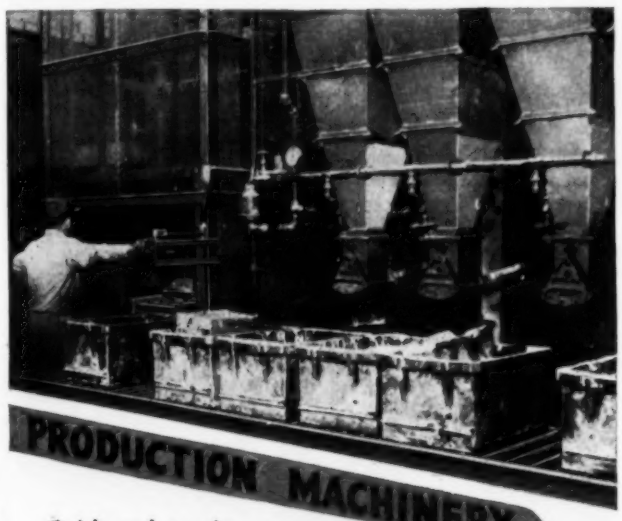
▲ Mention Item NED-8932 when writing ▲

TURNING ROLLS



By making it possible for all welds to be made in downhand position, turning rolls aid in producing tanks, drums, pipes and pressure and cylindrical vessels of all types. Vessels are placed on rollers and rotated around to welder or automatic welding head at desired speed. Features include antifriction self-aligning bearings in both power and idler rolls of larger sizes, lowered drive mechanism which permits unobstructed loading from either end, and combination steel and bronze worm wheel. Self-propelled turning rolls on four-wheel carriages are also available to make possible automatic welding of all circular and longitudinal seams with automatic welding head remaining in fixed position. Made by **Ransome Machinery Co.**, 1425 S. Second St., Dunellen, N. J.

▲ Mention Item NED-8933 when writing ▲



PRODUCTION MACHINERY

Quick and to the point! That's how Logan Conveyors serve industry. They supply orderly movement of raw materials and parts-in-process, to and from the many stages of production . . . at the proper working height, at the right time. That's how Logan Conveyors have *earned* their place as an integral part of today's production machinery. Logan Conveyors serve all industry. Write for helpful literature.

. . . NOT JUST AUXILIARY EQUIPMENT

Logan Conveyors
LOGAN CO., INC., 215 CABEL ST., LOUISVILLE, KY.

▲ Mention Item NED-8934 when writing ▲

SAFE-LINE
WIRE ROPE CLAMPS

Write for details of this—the only PERFECTED wire rope clamp on the market. Millions used by Manufacturers, the Armed Forces and Industries.

NATIONAL PRODUCTION COMPANY
4557 ST. JEAN AVENUE · DETROIT 13, MICHIGAN

▲ Mention Item NED-8935 when writing ▲

RESEAT VALVES AND BIBBS

PAYS FOR ITSELF ON FIRST 2 OR 3 JOBS!
Don't junk expensive globe or angle valves, bibbs, fixtures—reseat them! Order Skinner Valve and Bibb Reseater today. Easy to use. Guaranteed cutters leave seat glass-smooth, level, tight.
¼" to 2" $32.50
¼" to 3" $45.00

M. B. SKINNER CO., SOUTH BEND 21, IND.

▲ Mention Item NED-8936 when writing ▲

MONARCH
PORTABLE UNI-POINT RADIAL SAW
NOW ONLY $350.

BUILDERS! SHOPMEN! WOODWORKERS!

Now you can buy Uni-Point, the world's lightest 12-inch radial saw, at a price lower than that of any other. Makes practically every kind of cut in wood; has a thousand and one uses. Accurate, dependable, built to last for years. Easily carried on the job...plugs in anywhere. Big capacity. Famous Uni-Point cutting is exclusive—guarantees 25% greater production per man hour. Prompt shipment. Send for literature today!

AMERICAN SAW MILL MACHINERY CO.
50 Main Street, Hackettstown, N. J.

▲ Mention Item NED-8937 when writing ▲

NU-MATIC
GRINDING AND POLISHING WHEEL
Using Abrasive Bands

IT FOLLOWS CURVED, IRREGULAR and FLAT SURFACES

• • •

LIGHT WEIGHT
CHATTER-PROOF
CONSTRUCTED
for
HEAVY DUTY

• • •

NOTE: Drum compression adjustable to follow contours

ADAPTABLE TO YOUR GRINDING EQUIPMENT

A variable speed, power tool wheel 5" in dia. Pneumatic rubber drum takes standard 3½" wide abrasive bands. Drum air pressure adjustable 3 to 10 lbs. to meet operator's requirements. Provides 100% grinding surface—eliminates grinder marks—covers work better, faster. A low cost, flexible unit—a necessity for every shop. See your jobber or write for bulletin. Distributors wanted.

NU-MATIC GRINDERS, Inc.
10304 W. McNichols Road • Detroit 21, Mich.
Telephone UNiversity 3-2573

▲ Mention Item NED-8938 when writing ▲

PIPE COUPLING APPLIED IN ONLY 9 SECONDS

Simply assemble two malleable coupling parts over leak or around plain pipe ends, insert wedge key and tap wedge with hammer. That's all there is to it with Presto-Lock!

Presto-Lock will stop any leak that the coupling will cover. This permanently tight seal will withstand normal working pressures, vibration, stress and temperature variation on lines carrying water, oil, air or steam. Presto-Lock fits any pipe of standard steel dimensions.

By using Presto-Lock on plain-end pipe, the full strength of the pipe is retained. Machined threading and grooving leaves pipe exposed to corrosion. WITH PRESTO-LOCK COUPLINGS, PIPE WILL LAST TWICE AS LONG!

Flexibility—actually over thirty degrees at each joint—is a Presto-Lock feature. In other words, Presto-Lock acts as a sleeve, elbow and ball union at all times.

—Write for complete information—

DRINKWATER, Inc.
WAUKEGAN, ILLINOIS

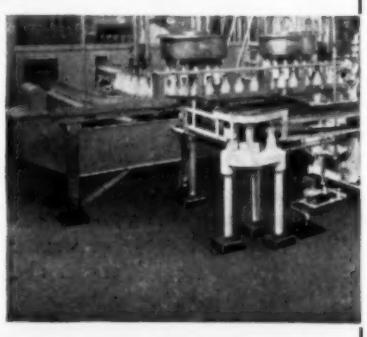
▲ Mention Item NED-8939 when writing ▲

Keep Production Moving—

HYDROMENT FLOORS

Set extremely hard and fast

Resist
Acids
Oils
Greases and
Alkalis



Will stand heavy traffic in 24 hours or less! Hydroment makes a perfect bond — does not shrink or crack. Can be used indoors or out—wherever floors are exposed to the toughest conditions of wear and chemical action.

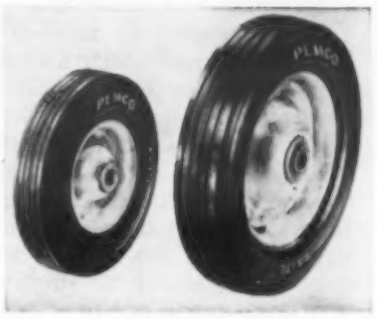
***Hydroment* SAVES TIME & EXPENSE**

It provides a hard, wear-resistant topping for new floors. Makes an ideal material for patching, grouting and bonding. Used extensively for bedding and joint filling in brick, tile floors; also for heavy machinery bases. For full details, write for free folder, "Hydroment."

The UPCO CO. 4805 Lexington Ave. Cleveland 3, Ohio

▲ Mention Item NED-8940 when writing ▲

RUBBER-TIRED WHEELS



Available in 6 and 8-inch sizes, these Pemco industrial wheels have 18-gage steel rims, cadmium or chrome finish, semipneumatic or hard rubber tires with soft tread and load capacities of up to 300 pounds. The 6-inch wheel utilizes Oilite bronze bearings, has 1½-inch tire width and ½ or ⅝-inch hole. The 8-inch wheel has roller bearings, 1¾-inch tire width and same hole sizes. Made by **Paramount Engineering & Mfg. Co.**, 1872 Ravine Rd., Kalamazoo, Mich.

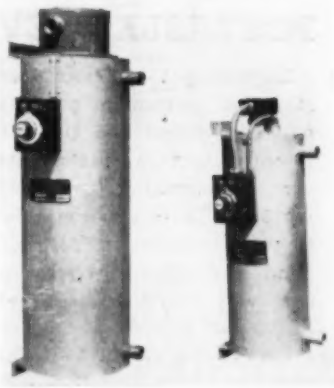
▲ Mention Item NED-8941 when writing ▲

PORTABLE ELECTRIC DRILL

Portable, pistol - grip type Hole-Shooter electric drill is available in three different drill size capacities and five rated speeds. Motor brushes and commutator are accessible without dismantling drill. Control switch contained in pistol grip is of heavy-duty two-pole type and meets all aircraft industry specifications. Tools are furnished with alternating or direct current universal motors for operation on 115-volt current. They are rated 3/8-inch at 650 revolutions per minute; 5/16-inch at 1000 revolutions per minute; and ¼-inch at 2000, 3500 and 5000 revolutions per minute. Tool housings are cast aluminum. Made by **Milwaukee Electric Tool Corp.**, 5328 W. State St., Milwaukee 8, Wis.

▲ Mention Item NED-8942 when writing ▲

ELECTRIC OIL PREHEATER



Designed to preheat heavy fuel oils so that they flow and atomize easily for economical use in oil burners, line of Indeeco electric preheaters includes models rated from 600 to 16,500 watts for operation on all common voltages. They are available as package-units ready for connection to oil and electric lines. Arc welded heavy-duty steel tanks are equipped with mounting flanges, electric immersion heaters are enclosed in seamless steel tubes, and 2-inch rock wool insulation is used. Oils handled are preheated to a viscosity of about 150 Saybolt Universal, and automatic temperature controls can be set to prevent heating past flash or carbon separation point. Made by **Industrial Engineering & Equipment Co.**, 715 S. Theresa Ave., St. Louis 3, Mo.

▲ Mention Item NED-8943 when writing ▲

Brady QUIK-LABELS
mark your wires faster!

QUIK-LABELS code wires, leads, circuits, relays, parts, etc. faster and at lowest buy-and-apply cost. • Pre-cut to exact size, QUIK-LABELS come on handy cards, stick without moistening. • Replace slow and costly string tags, roll tapes, decals, metal tags, etc. • Silicone plastic coated to resist dirt, grease, moisture and abrasion. • Exclusive Starter-Strip automatically releases any or all labels; it is faster, safer, snag-proof. • Over 700 NEMA and ASA markings and colors in stock. • Maintenance men carry cards to the job. • QUIK-LABEL Dispenser holds cards for production operators and leaves both hands free for faster work. • QUIK-LABELS are sold by distributors in over 125 principal cities of U. S. A. and Canada. ***Write for Useful Literature and FREE Sample Cards.***

W. H. BRADY COMPANY
Indentification Specialists
Established 1914
238 W. Wells St., Milwaukee 3, Wis.
Plant: Chippewa Falls, Wis.

▲ Mention Item NED-8944 when writing ▲

HOOKS, TONGS GRIPS and SLINGS

A COMPLETE LINE OF HOIST GRABS—for fast safe handling of *pipe, rails, drums, plate* and *structural steel, stone, timber, boxes* and *odd-shaped objects.* Carefully engineered Downs Hoist Grabs have a safety factor much greater than capacity ratings listed. Many types of hooks, tongs, grips and slings available for quick delivery.

WRITE FOR FREE ILLUSTRATED CATALOG #200

DOWNS CRANE & HOIST CO.
MECHANICAL ENGINEERS
540 W. VERNON AVENUE
LOS ANGELES 37, CALIF.

Electric Cranes • Hand Cranes • Jib Cranes • Sheaves • Sheave Blocks
Plate Grips • Plate Hooks • Crane Trolley Hoists • Crane Wheels • Crane End Truck Units • Jib Crane Fittings • Automatic Mechanical Load Brake Crane Hook Blocks

▲ Mention Item NED-8945 when writing ▲

Get Lifetime Fidelity in

PRESSURE RECORDERS!

Install a Foxboro Pressure Recorder, and you get maximum assurance that you'll never need to replace it throughout the lifetime of the equipment it serves!

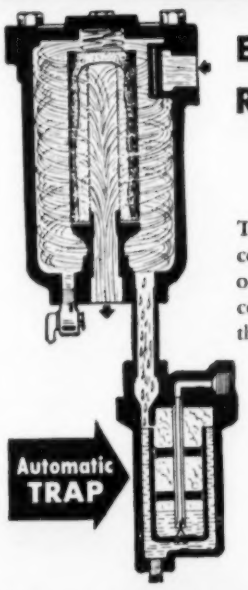
Foxboro Pressure Recorders are *engineered for lifetime fidelity* . . . and designed for any service from full vacuum to 10,000 psi. (higher ranges on special order.) Multiple-pen models record up to 4 pressures on single chart.

Write for complete Catalog 22A. **The Foxboro Co., 134 Neponset Avenue, Foxboro, Mass., U. S. A.** Also Montreal, Canada. Branches in principal cities.

FOXBORO Reg. U. S. Pat. Off. PRESSURE RECORDERS

▲ Mention Item NED-8946 when writing ▲

Poro-Stone Filtration
FOR COMPRESSED AIR



EFFICIENTLY REMOVES

OIL, WATER
PIPE SCALE

The Adams *Poro-Stone* Filter gives continuous service without attention or maintenance expense. Efficient centrifugal separation *plus* diffusion through Poro-Stone, removes contamination completely without pressure loss. Automatic Trap eliminates attention and assures continuous and efficient filter operation. Write for complete data—Bulletin 105.

R. P. ADAMS CO., INC.
227 E. Park Drive • Buffalo 17, N. Y.

ADAMS *Poro-Stone* AIR FILTER

▲ Mention Item NED-8947 when writing ▲

Listed in our publication "Applications of Molybdenum Cast Irons" are hundreds of proved compositions of high-grade irons suitable for various duties and applications, each alphabetically arranged. Quickly find just the information you require, including tensile and other mechanical properties and helpful comments.

For busy engineers, designers or foundrymen, this work is a valuable guide to the best in modern alloy irons.

This booklet sent to you FREE

Climax Molybdenum Company
500 Fifth Avenue · New York City

F4

Mention Item NED-8952 when writing

Special inorganic fiber packing . . . high in oil-holding capacity!

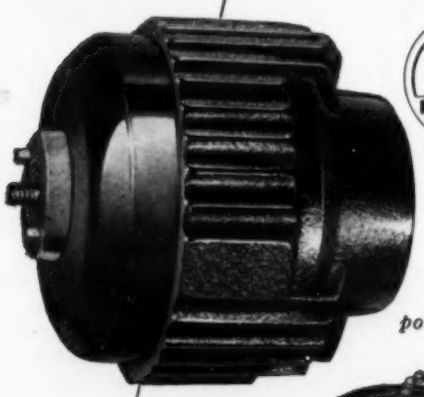
Forced recirculation of lubricant . . . for long, service-free operation!

NEW Redmond
SINGLE BEARING, SHADED POLE
MONOMOTORS

Precision finished single bearing . . . extra long for true shaft alignment and free running rotor!

Extra large oil reservoir . . . isolated from heat permanently sealed!

Here are the features you've wanted in single bearing low-range power. It's the new Redmond MonoMotor . . . 4-pole shaded pole, up to 9 watts output . . . designed to bring you: (1) Extra large oil reservoir . . . isolated from heat, permanently sealed. (2) Special inorganic fiber packing . . . dependable oil release, improved lubricating action. (3) Forced feed lubrication of bearing surfaces through spiral pump on shaft. (4) Extra long single bearing for accurate, sustained rotor alignment. (5) Varnish sealed windings for humidity resistance and cooler operation. (6) Die cast aluminum rotor. (7) Rugged cast iron case. Mounting brackets available, too, for simplified installation. Write for details.



Key to Your low-range power requirements

Redmond
COMPANY, INC.
OWOSSO, MICHIGAN

OFFICES IN NEW YORK, CHICAGO, DAYTON, LOS ANGELES, DALLAS

EXPANDED FACILITIES • PROMPT DELIVERIES • SERVICE BEFORE AND BEYOND THE SALE

Mention Item NED-8953 when writing

SMALL SWITCH

Affording shielding between contact sections, model MCT midget size switches are especially suitable for applications where coupling between circuits is to be avoided. Type MCT-4 switch has two sets of four mounting holes which fit all standard mounting centers, and its total depth including terminals is $2\frac{31}{32}$ inches. Model MCT-1 switch has ½-inch-20 single hole mounting bushing and total depth of 2½ inches.

Switches can be provided with nonlock on both sides, nonlock on one side, lock on both sides, lock on one side or two-position with no center position. Relatively unlimited contact and buildup variations permit special as well as ordinary circuit arrangements. Palladium contacts are supplied. Made by **General Control Co.**, 1200 Soldiers Field Rd., Boston 34, Mass.

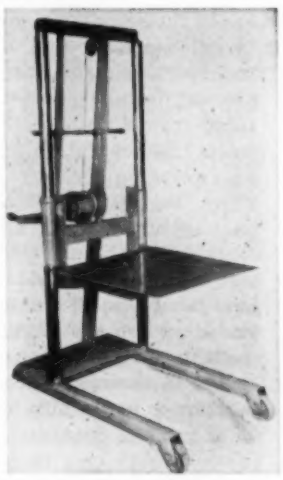
Mention Item NED-8954 when writing

INSULATED CONDUIT BUSHING

Protection against abrasion of cable insulation and accidental grounds is provided by Bushend insulated metallic conduit bushing. Having high dielectric strength and resistance to moisture absorption, insulation is permanently positioned in corrosion-resistant wrought alloy base. Threads are free, clean-cut and nonseizing; and knurls are deep to facilitate tightening even in restricted places. Bushing is approved by Underwriters' Laboratories. Made by **Buchanan Electrical Products Corp.**, 1292 Central Ave., Hillside, N. J.

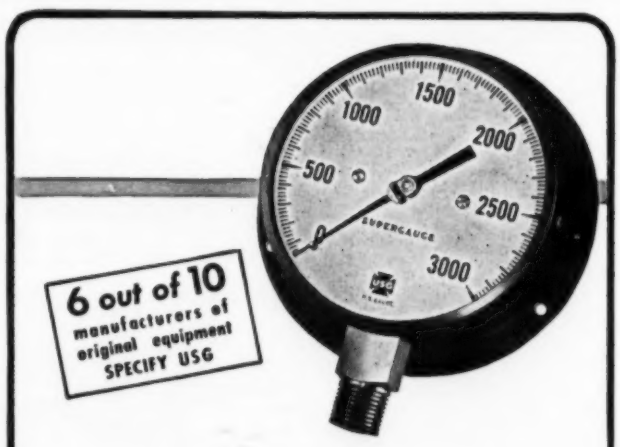
Mention Item NED-8955 when writing

PORTABLE ELEVATOR



Lightweight tubular construction, convenient push bar and two swivel and two stationary casters make this type C elevating unit fully portable. It can be supplied in many capacities, for both hand and electric operation, and with various size platforms and heights. It incorporates lifetime bronze bushings, easily operated floor lock, self-locking safety type winch and three-speed handle which is adjustable for light, medium and heavy loads. Standard type has capacity of 750 pounds, 24 x 24-inch platform and lifting range is from 6 to 53 inches. Made by **Montgomery & Co.**, 60 Murray St., New York 7, N. Y.

Mention Item NED-8956 when writing



6 out of 10 manufacturers of original equipment SPECIFY USG

Tomorrow's accuracy is here today in the new U. S. Supergauge. Get complete information about this superb instrument now.

U.S. INSTRUMENTS Tell The Truth

UNITED STATES GAUGE

USG

DIVISION OF AMERICAN MACHINE AND METALS, INC., SELLERSVILLE, PENNA.
Manufacturers of Pressure, Temperature, Flow and Electrical Measuring Instruments

Mention Item NED-8957 when writing

CUT WORK GLOVE COSTS up to 40%

SURETY IMPREGNATED COTTON WORK GLOVES OUTWEAR UNTREATED GLOVES AS MUCH AS 8 to 1

Your work glove replacement costs go way down with Surety impregnated cotton work gloves on the job. Sureseal impregnation of palm adds strength to fibres, seams and stitching, adds resistance to abrasion, snagging, and friction — won't peel, crack or chip, won't become slick. Knit wrist, band-top and gauntlet type available. Surety can treat your own cotton, leather, or asbestos gloves, too. Write for details.

THE SURETY RUBBER CO. CARROLLTON, OHIO

Mention Item NED-8958 when writing

HERE IT IS --

Write for your copy TODAY!

4 Reasons why YOU should have this Fact Filled Folder

THE ILLUSTRATIONS show how the loading and unloading of trucks and freight cars can be speeded up with less handling, less breakage and with a greater margin of safety.

2. Methods of extending supply lines quickly to eliminate empty-handed back tracking are also pictured.
3. How "day-to-day handling problems" can be easily and simply solved is fully explained.
4. This booklet proves the superiority of A-F PortA-Flow Portable Conveyor construction and how structural strength is achieved without adding bulky weight.

★*WRITE FOR YOUR FREE Copy Today!*

THE ALVEY-FERGUSON CO.
41 Disney St. *Established 1901* CINCINNATI 9, OHIO
Offices or Representatives in Principal Cities

CONVEYING EQUIPMENT
Alvey-Ferguson
METAL PRODUCTS CLEANING EQUIPMENT

Mention Item NED-8959 when writing

WINNING POWER!

WISCONSIN HEAVY-DUTY *Air-Cooled* ENGINES

Four of a kind — winning power to spare in this hand! The same winning power you draw when you specify Wisconsin Air-Cooled Engines for your equipment . . . compact, heavy-duty singles in two types ranging from 2 to 9 hp.; twin-cylinder models from 7 to 13 hp., and V-type 4-cylinder engines from 15 to 30 hp.

All models are designed for heavy-duty service — delivering "Most Hp. Hours" of on-the-job service.

All models are extremely compact . . . to fit the machine as well as the job.

All models are built to one standard of top-quality excellence in design, materials and precision construction.

For "Winning Power", specify Wisconsin Air-Cooled Engines. Engineering data gladly supplied.

MOST H.P. HOURS

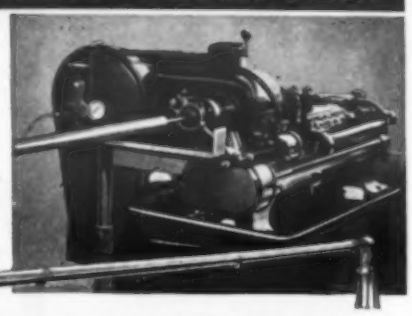
WISCONSIN MOTOR CORPORATION
World's Largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 14, WISCONSIN

Mention Item NED-8960 when writing

PNEUMATIC-AUTOMATIC Newton BAR FEED

FOR LATHES and SCREW MACHINES

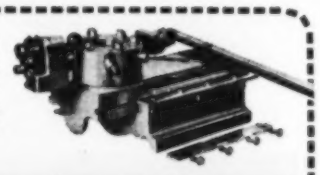
Feeds Round, Square and Hex Bar Stock



★ FEEDS ANY LENGTH STOCK into lathe or screw machine rapidly, accurately.
★ EASY TO LOAD...Protects bar stock from mars and scratches.
★ STANDARD SIZES...Handle 1/8"dia. to 3 3/4"dia. stock.
★ MAXIMUM SAFETY...Rotating stock completely enclosed in Bar Feed Tube.
★ ADAPTABLE to all turret lathes and single spindle screw machines.
★ QUIET OPERATION...Spinning stock is centered to eliminate whip.

WRITE FOR LITERATURE TODAY!

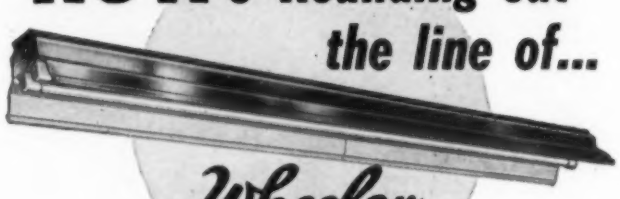
Install a Newton Precision Bed Turret for maximum tooling. This self indexing bed turret accommodates six tool positions...has adjustable gibs. Fast.. smooth ...profitable to operate.



A. K. TOOL COMPANY
2029 BLAKE AVENUE • LOS ANGELES 26, CALIFORNIA

Mention Item NED-8961 when writing

NOW! Rounding out the line of...



Wheeler
"SKILLED LIGHTING"

...New SLIMLINE Fixtures

This sleek-looking flourescent fixture is a genuine Wheeler "Skilled Lighting" Unit for use with new high-efficiency SLIMLINE Lamps. Exclusive center lamp support to prevent lamp vibration is typical of Wheeler thoroughness in design.

The channel is 1-piece, available in either baked enamel or Wheeler Vitreous Porcelain Enamel finish. Reflectors are furnished in Vitreous Porcelain Enamel finish only.

Highest efficiency 8-foot lamps. Instant starting. Easiest to handle . . . only two lamps to install or replace. Write for complete details. Wheeler Reflector Company, 275 Congress Street, Boston 10, Mass.

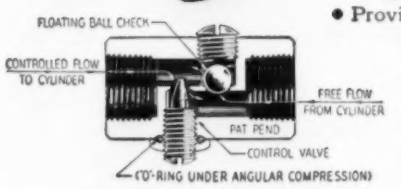
Distributed Exclusively Through Electrical Wholesalers

Wheeler REFLECTOR COMPANY
Lighting Equipment Specialists Since 1881

Mention Item NED-8962 when writing

New FLOW CONTROL VALVE for Air or Hydraulic Use

• Combines flow control and ball check valves in one compact body
• Provides wider range of speed selection.. assures full use of power



Detail above illustrates action of air or liquid flow through valve.

Combining an efficient stainless steel FLOATING BALL CHECK which opens and closes at the *slightest* change in flow direction, with a variable orifice needle adjustment, the Pneu-Trol Flow Valve is compactly built to provide easier installation and more consolidated piping arrangements.

Made of Brass (working pressures up to 1000 psi) or Steel (for higher pressures) the Valve is available in 4 sizes: 1/8", 1/4", 3/8" and 1/2". All other parts are stainless.

Attractive prices to new equipment manufacturers.

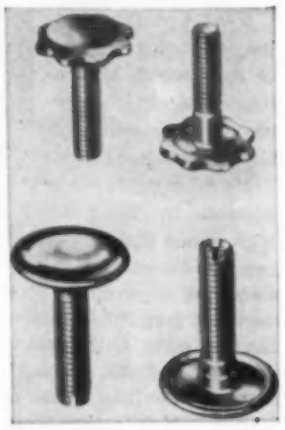
Write for Illustrated Circular

pneu-trol

Pneu-Trol Devices, Inc.
3122 North California Ave., Chicago 18, Ill.

Mention Item NED-8963 when writing

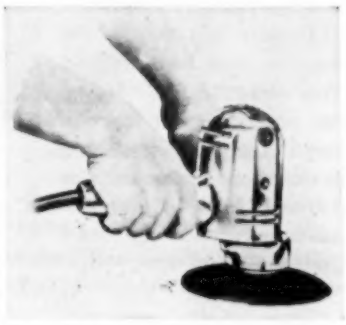
ADJUSTABLE LEG LEVELERS



Appliances such as space heaters, stoves, water heaters, refrigerators, and washers as well as lightweight industrial machines can be leveled accurately and rapidly by means of FS or FR adjustable leg levelers. Type FS feet have scalloped rim formed to fit conventional eight-point socket wrenches, and once leveling device is attached, it can be adjusted by hand. Type FR feet have smooth rim and incorporate slotted end to facilitate screwdriver adjustment. These units are particularly suited for installation on appliances which are located on carpeted floors. Made by **Ohio Nut & Bolt Co.**, 608 Front St., Berea, O.

Mention Item NED-8964 when writing

PORTABLE ELECTRIC TOOL



Portable electric model No. D-6 multipurpose tool will perform grinding, polishing, drilling and cutting operations by simple change of attachments. Tool will drill up to 1/4-inch hole in metal and up to 1/2-inch hole in wood. Drill chuck can be used for numerous standard attachments such as hole saws, wire brushes, cup grinders, abrasive points and others. Guide grip can be attached to either side of tool for left or right-hand operators. Operating on standard 115-volt alternating or direct current, tool has no-load speed of approximately 3000 revolutions per minute. Made by **Porter-Cable Machine Co.**, 1710 N. Salina St., Syracuse 8, N. Y.

Mention Item NED-8965 when writing

INDUSTRIAL TRACTOR

Featuring 36-inch turning radius, this Lo-Bed industrial tractor is powered by model AKS Wisconsin gasoline engine and equipped with Salsbury automatic clutch and transmission. The 21-inch diameter finger-tip throttle ring located waist high facilitates 'inching' along aisles for pick-ups, and speeds up to 8 miles per hour can be attained on longe hauls with operator riding while towing train. Hand brake on drive wheel and heel brake on load wheels provide for equalized braking. Automatic coupler release is conveniently located. Made by **Salsbury Corp.**, 1161 E. Florence Ave., Los Angeles 1, Calif.

Mention Item NED-8966 when writing

NEW!
VARGLAS TUBING
IMPREGNATED
with GE Permafil

TOUGHER
...more FLEXIBLE
...more HEAT-RESISTANT
Send for FREE Sample

Here is a new tubing with a new synthetic coating of General Electric Permafil on Fiberglas braid that is . . .

So FLEXIBLE that it can be twisted, bent, wrapped, tied in knots . . . without cracking or peeling.

So TOUGH that severe use will not destroy its dielectric property.

So HEAT-RESISTANT that it will withstand high temperatures and can be after-treated in baking and varnishing operations.

Varglas Permafil is made in standard colors, in a wide range of sizes. It is available in coils—so that you can cut the exact lengths you need, without waste.

And . . . it is a premium tubing at a reasonable price. Write today for free sample and full information.

VARFLEX CORPORATION
310 N. Jay St. Rome, N. Y.

Mention Item NED-8967 when writing

hand pushed TROLLEYS

SIDE ROLLERS ASSURE EASY OPERATION AND LOW WEAR ON CURVED TRACK

P-2530
1/2 Ton Capacity
4"-12" I-Beam

Webb *Hand Pushed Trolleys* are versatile, simple, economical, effective. Drop-forged, hardened wheels assure long wear; ball bearings and side-guide rollers make them very easy to push. Write for *Hand Pushed Trolley* Bulletin and prices.

JERVIS B. WEBB CO.
8951 ALPINE • DETROIT 4, MICH.
OFFICES IN PRINCIPAL CITIES

Mention Item NED-8968 when writing

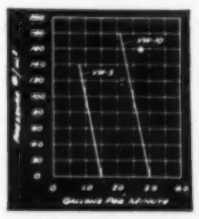
TWO NEW EASTERN PUMPS FOR NONLUBRICATING LIQUIDS

The recently announced VW line of positive pressure vane type pumps for nonlubricating liquids such as water is now supplemented by two new models — VW-5 and VW-10. The basic characteristics of construction that were built into the initial model of the series, VW-1 are incorporated in the new models. Composition bearings that require no lubrication beyond that furnished by the liquid being pumped eliminate all possibility of contamination. Vanes of the same material as the bearings are held in contact with the pump chamber by their special design and radii. In this way volumetric efficiency is maintained without centrifugal force. A built-in bypass is furnished for outlet pressure regulation. Shaft seal is accomplished by a mechanical rotary seal.

Specifications:

Model	Motor H.P.	Wgt. Lbs.	L	W	H
VW-5A	1/8	26	12 7/16"	5 1/2"	5 3/4"
VW-5B	1/4	32	14 5/32"	6 5/16"	6 21/32"
VW-10A	1/4	34	15 1/8"	6 5/16"	6 21/32"
VW-10B	1/3	34	15 1/8"	6 5/16"	6 21/32"
VW-10C	1/2	52	17"	7 1/2"	7 3/8"

Performance: See chart.



Eastern Industries has engineered more than 300 different pumps for industrial applications. If you have a pumping problem where small size, light weight and high performance are factors, write us. Ask for Bulletin 103 and address all inquiries to Eastern Industries, Incorporated, 296 Elm St., New Haven, Conn.

EASTERN INDUSTRIES
Incorporated
NEW HAVEN, CONNECTICUT
Norwalk, Connecticut Newton, Massachusetts

Mention Item NED-8969 when writing

NORMA-HOFFMANN Precision BEARINGS

A TYPE AND SIZE FOR MOST APPLICATIONS

No matter what your bearing requirement . . . for electric motors, machine tools, business machines, instruments or household appliances ... Norma-Hoffmann can give you the right bearing for your particular application. These *Norma-Hoffmann precision bearings*, ball or roller, will improve product performance with efficient friction-free operation. Their built-in ability to operate dependably under every load, speed and duty means you get long life with minimum maintenance. 108 distinct series from 1/8" to 21" bore gives you a wide range of choice. Write for catalog.

NORMA-HOFFMANN BEARINGS CORPORATION
Precision Ball, Roller and Thrust Bearings
STAMFORD, CONNECTICUT

Mention Item NED-8970 when writing

H. S. COVER, South Bend, Ind.

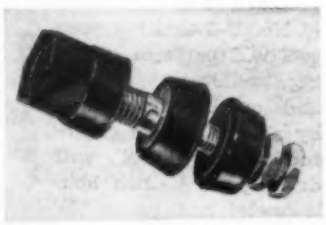
▲ Mention Item NED-8971 when writing ▲

HIGH SPEED WOOD BIT

Fast accurate boring of holes in soft or hard wood, Masonite, Bakelite, plywood, fiber composition board and similar materials is made possible by Whiz-Bit high speed bit. Holes can be bored in any direction regardless of grain, at angles from 45 to 90 degrees, through knots, and to depth of 4½ inches. Bit can be used with drill presses and portable electric or pneumatic drills. Long pilot starts hole and maintains diameter within plus or minus 0.005-inch. Made of forged molybdenum steel, bit is available in sizes from ⅜ to 1⅛ inches. Standard set contains six bits and one countersink. Made by **Rex Laboratories,** 1700 Gent Ave., Indianapolis 2, Ind.

▲ Mention Item NED-8974 when writing ▲

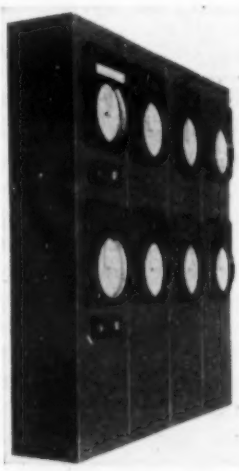
BINDING POST



Design of this 5-Way binding post adapts it for five separate uses. It can be employed for permanent clamping, spade lug connection, plug-in for banana plugs, looping and clamping, and clip lead. Rated 30 amperes and 1000 volts, posts can be used in wide range of equipment and for panels. Captive head cannot become lost, and red and black plastic colors provide quick reference or polarity determination. Made by **Superior Electric Co.,** 493 Hannon Ave., Bristol, Conn.

▲ Mention Item NED-8975 when writing ▲

STANDARD CUBICLES



All types of control, recording and indicating instruments can be contained in standard 10-gage steel protective cubicles. Two types are available. First is individual cubicle which can be bolted with others to provide wide variety of combinations in which units can be added, interchanged or removed to meet varying operating conditions. Second type consists of specified number of housings which are welded together as complete unit but with divided front simulating individual sections. When intended for use under hazardous conditions, cubicles can be fabricated with vapor-sealed doors and gas-tight welded seams. Supplied in any color and choice of finishes, units are available in widths of 18, 24, 30 and 36 inches; depths of 12, 15, 18 and 21 inches; and heights of 72, 78, 84 and 96 inches. Made by **K & H Industrial Products, Inc.,** Dept. 17, 459 Morgan Ave., Akron 11, O.

▲ Mention Item NED-8976 when writing ▲

SAVE TIME . . . STORAGE SPACE . . . AND AVOID SPILLAGE

with **TELLEVEL** AUTOMATIC BIN-LEVEL CONTROL

Let TELLEVELS watch your bin-level for you . . . Avoid empty or overflowing storage bins.

Mount a TELLEVEL near the top and another near the bottom of your storage bin . . . As the material-level falls or rises, the light pendant is pushed aside . . . Automatically *starts or stops* conveyor, elevator or pump . . . Can be furnished for bulk materials or liquids.

Check possible uses. Write now for Bulletin No. 440.

STEPHENS-ADAMSON MFG. CO.

Tellevel-Bin Level Controls · Saco Speed Reducers · Car Loaders · Car Pullers · Winches · SealMaster Ball Bearings

12 RIDGEWAY AVE., AURORA, ILLINOIS

▲ Mention Item NED-8978 when writing ▲

Diagram shows double-acting air cylinder operated by Valvair 4-way solenoid valve, spring return.

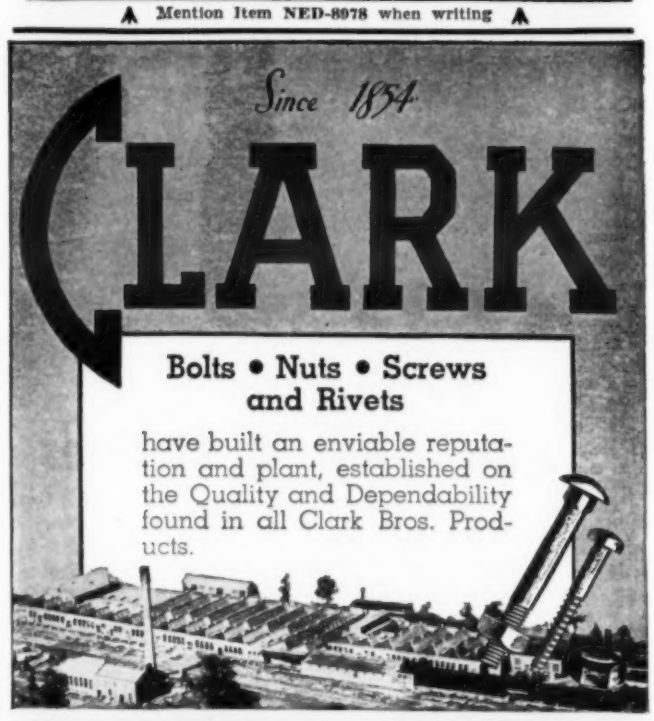
DEPENDABILITY — That's outstanding in Valvair performance. Solenoids are Stellite-welded to resist wear; do not mushroom. Standard Valvairs have operated over 2,000,000 times at 100 lbs. with never a leak. *Exclusive features.* Patented basic design eliminates metal seats; non-corrosive (cast bronze body, stainless steel parts); full pipe area used with minimum drop. 2-way, 3-way, 4-way types. Get full details and prices.

Ask for Bulletin "A-N"

VALVAIR CORPORATION • 454 Morgan Avenue, Akron 11, Ohio

Valvair 2-WAY 3-WAY 4-WAY

▲ Mention Item NED-8972 when writing ▲



CLARK BROS BOLT CO.

MILLDALE, CONN.

▲ Mention Item NED-8979 when writing ▲

True in 1899...True today.. You Get BETTER MARKING with Pannier "Master Markers"

Famous in the steel industry for their durability and "good impressions", these Pannier "Master Markers" are *still* your best bet for efficient and clear-cut marking of steel and steel products. Write for full information today.

Offices: Pittsburgh · Chicago · Los Angeles · Youngstown · Philadelphia

THE PANNIER CORPORATION

301 PANNIER BLDG.

Pittsburgh 12, Pa.

▲ Mention Item NED-8973 when writing ▲

SIMPLIFIED COUPLING *FOR* CONVEYOR SECTIONS

(Editorially speaking, this is an ad)

As important to you as any editorial are the facts about the simplified coupling for conveyor sections developed by The E. W. Buschman Company. "Quick-Eez" coupling—an exclusive feature of Buschman Portable Conveyors — make each section independent of the adjoining one. Either section may be removed without disturbing the other, permitting easy passage through your conveyor line with minimum trouble and time loss.

Illustrations show you how easily "Quick-Eez" Coupling Works. Extended end plates of conveyor sections fit into slotted top of stand, forming a rigid yet convenient coupling. To remove a section, just lift it out. Nothing to unhook . . . no need to move the supporting stands.

"Quick-Eez" Coupling is just one of the many features Buschman Portable Conveyors offer. Light in weight but strong and rugged, they're built in roller or wheel types . . . all full ball-bearing equipped. Weighing less than eight pounds per foot straight or curved sections are available in either five or ten foot standard lengths. Stands provide adjustable heights from 12" to 48".

For the complete story, write for Bulletin 10.

NATIONAL MATERIALS HANDLING EXPOSITION

Buschman

The E. W. Buschman Co.

Spring Grove at Winton Place *Cincinnati 32, Ohio*

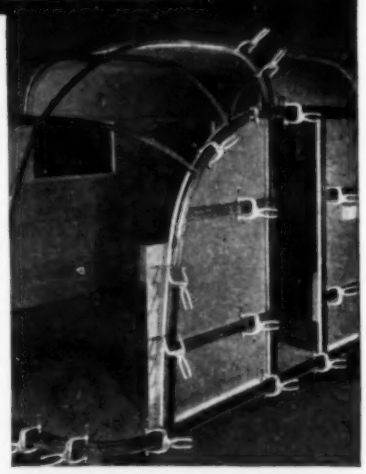
▲ Mention Item NED-8977 when writing ▲

DESIGNED FOR DE-STA-CO PORTABLE TOGGLE CLAMPS

This progressive trailer coach manufacturer *designed* his frame of square tubing for line assembly by welding. It takes pressure to draw formed tubing together for welding — it takes fast action to keep handling costs low — it takes De-Sta-Co Portable Plier clamps to meet all the qualifications this rapid production demands. You, too, can rely on their quick, positive toggle lock and release, their ample clamping pressure and easy adjustment to varying thicknesses and their wide, deep jaws for your bulky, awkward jobs.

These NEW De-Sta-Co Portable Clamps are machined forgings with deep-section jaws and grips. Bearing pins are long-wearing stainless steel. Models 468 and 474 are available with spring compensating or screw adjustment.

Write for folder describing Portable Toggle Clamps or our general catalog No. 47.



Portable Clamp Uses: Courtesy Vagabond Coach Co.

Assembly of
- Sheet metal ducts, cabinets, furnaces . . .
- Aircraft frames and skins . . .
- Truck and auto bodies . . .
- Wood and plastic laminations . . .

For drilling, welding, riveting, cementing . . .

DETROIT STAMPING COMPANY

360 Midland Ave., Detroit 3, Mich.

▲ Mention Item NED-8980 when writing ▲

FOR GREATER OPERATING ECONOMY...

SEALMASTER
Self-Aligning
BALL BEARING UNITS

SEALMASTERS alone have this exclusive combination of Features

Pillow Blocks
Take-Up Units
Flange Units
Cartridge Units
Flange Cartridge Units

- **Positive, Permanent Seal**—Patented centrifugal seal retains lubricant and keeps out dirt.
- **Self-Aligning**—SealMasters simplify mounting. Shaft misalignment cannot distort seal.
- **Pre-Lubricated**—SealMaster bearings are shipped with lubricant sealed in, ready for immediate service.
- **Patented Locking Pin**—Prevents rotation of outer race in housing . . . permits several degrees of shaft misalignment and positions unit for relubrication.

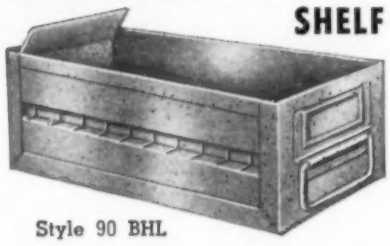
Write for SealMaster Catalog 845

STEPHEN S-ADAMSON Mfg. Co.
12 Ridgeway Ave., Aurora, Illinois — Los Angeles, Calif. - DeNeville, Ont.

Factory Representatives and Dealers in All Principal Cities

Mention Item NED-8981 when writing

STEEL ADJUSTABLE COMPARTMENT SHELF DRAWERS



Style 90 BHL

IMMEDIATE SHIPMENT

BAY adjustable compartment shelf drawers are ideal for handling and storing small quantities of small parts. Boxes are slotted on 1" centers to accommodate dividers. Label holder on front of box for easy identification of contents. Drop handle on front only. Drawers are finished in baked green. Dividers are furnished at slight extra cost.

OTHER SIZES AND STYLES AVAILABLE

95 BHL	5½ x 11¾ x 4⅝	Green Finish—$1.12 ea.
96 BHL	5½ x 17¾ x 4⅝	Green Finish—$1.27 ea.
97 BHL	8¼ x 11¾ x 4⅝	Green Finish—$1.20 ea.
98 BHL	8¼ x 17¾ x 4⅝	Green Finish—$1.39 ea.

Send for Catalog

All Prices F. O. B. Philadelphia Plant

Phone—Wire—Write

BAY INC. 3009 North 16th Street PHILADELPHIA 32, PA.

Telephone BAldwin 9-1805

Mention Item NED-8982 when writing

Superior
SMALL METAL TUBING
(Max. O. D. ⅝")
FITS ALL APPLICATIONS
Seamless and WELDRAWN*

In...

• CARBON • ALLOY • STAINLESS STEELS
NICKEL • "MONEL" • "INCONEL" •
BERYLLIUM COPPER

For...

MECHANICAL—ELECTRICAL—
CHEMICAL—FOOD PROCESSING
—INSTRUMENT and
ELECTRONIC INDUSTRIES

*"LOW COST" WELDRAWN, Reg Trade Mark, Superior Tube Company

For Superior tubing on the West Coast, call PACIFIC TUBE COMPANY, 5710 Smithway Street, Los Angeles 22, California ANgeles 2 2131

Superior
THE BIG NAME IN SMALL TUBING (.010" TO ⅝" O.D. MAX.)

SUPERIOR TUBE COMPANY 2018 Germantown Avenue Norristown, Pa.

Mention Item NED-8983 when writing

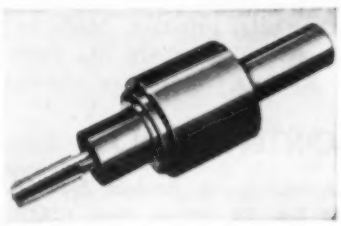
BELT & DISK SANDER

Designed for efficient finishing of small metal, wood and plastic parts, this Atlas combination belt and disk sanding machine will handle long, short and wide stock; irregular shapes; edges; ends; curves; angles and double angles. Table can be used with either disk or belt, and disk and guard are easily removed for sanding wide stock on belt. Belt operates in either horizontal or vertical position. Unit is powered by ¼ or ⅓-horsepower 1725-revolution per minute motor. Made by **Atlas Press Co.**, 2423 N. Pitcher St., Kalamazoo 13D, Mich.

Mention Item NED-8984 when writing

FLOATING TAP HOLDER

Incorporating parallel and angular float as well as releasing clutch and pull-out, this tap holder corrects for parallel and angular misalignment. It assures accurately tapped holes, will not bind or freeze under tension or compression, and floats tap out of hole freely. Releasing clutch is designed to prevent wear and assure positive release. Amount of float is adjustable, and tool can be changed easily from right to left hand operation. Tap holder is made in 2½-inch size to take taps from ½ to 1¼-inch sizes and can be used on all makes of turret lathes and automatics. Made by **Empire Tool Co.**, 8772 Grinnell Ave., Detroit 13, Mich.



Mention Item NED-8985 when writing

DEBURRING BARREL

Burrs are removed from machined parts without affecting close tolerances by means of combination deburring barrel and separator. Uniform finish produced is suitable for painting and many types of electroplating and also serves as preparation for burnishing. Barrel shown has two compartments so that two jobs can be run simultaneously, and units with one, three or four compartments are available also.

Barrel is rotated by enclosed variable speed drive at any desired speed between 13 and 39 revolutions per minute. Speed ranges based on 1:3 or 1:4 ratios can be furnished also. As barrel is emptied, load slides down chute into motor-driven separator which separates work and media into hopper and removable drawer. Made by **Belke Mfg. Co.**, 947 N. Cicero Ave., Chicago 51, Ill.

Mention Item NED-8986 when writing

HALLOWELL
Steel Collars

"Hallowell" Solid Steel Collars, functionally proportioned throughout, are precision-machined so faces run perfectly true . . . are also highly polished all over . . . yet they cost less than common cast iron collars. 3" bore and smaller are made from Solid Bar Stock. To make sure the collar won't shift on the shaft, they are fitted with the famous "Unbrako" Knurled Point Self-Locking Socket Set Screw—the set screw that won't shake loose when once tightened. "Hallowell" . . . a "buy word" in shaft collars . . . available in a full range of sizes for IMMEDIATE DELIVERY

Ask for the name and address of your nearest "Hallowell" Industrial Distributor and your copy of the "Hallowell" catalog.

OVER 45 YEARS IN BUSINESS

STANDARD PRESSED STEEL CO.
JENKINTOWN, PENNSYLVANIA BOX 581
CHICAGO • DETROIT • INDIANAPOLIS • ST. LOUIS • SAN FRANCISCO

Mention Item NED-8987 when writing

FIRING BIG FURNACES WITH OIL?
Micromax Will Dole It Out Accurately

The Spang-Chalfant Division of The National Supply Co. heat-treats big batches of two-ton drill collars in this efficient Hagan Furnace.

Micromax pyrometers control the big furnace, apportioning fuel to each zone with the thrifty precision made possible by the pyrometer's dependable performance. The controllers make sure that each collar gets the temperature required throughout its long stay in the furnace, with all necessary allowance for the widely-varying requirements from zone to zone.

Write for further information.

LEEDS & NORTHRUP COMPANY, 4985 STENTON AVE., PHILA. 44, PA.
LEEDS & NORTHRUP
MEASURING INSTRUMENTS • TELEMETERS AUTOMATIC CONTROLS • HEAT-TREATING FURNACES
Jrl. Ad N-33A-621 (lb)

Mention Item NED-8988 when writing

For Solid Support on Uneven Foundations

Give motors, machines, tanks and other heavy equipment, mounted on rough or sloping foundations, firm, sure support by using Smooth-On No. 1 Iron Cement. Applied without using heat . . . fills all gaps . . . hardens like metal . . . is stronger than concrete . . . stays in place, for it expands slightly as it sets. Order Smooth-On No. 1 from your supply house in 1-, 5- or 20-lb. size . . . or direct from us if necessary.

FREE 40-PAGE REPAIR HANDBOOK

Shows countless short-cut, time-saving, money-saving repairs on plant equipment, made with Smooth-On Cements. Cracks sealed, leaks stopped, loose parts tightened. 170 illustrations. Write for *your* free copy TODAY.

SMOOTH-ON MFG. CO., Dept. 10M,
570 Communipaw Ave., Jersey City 4, N. J.

Do it with SMOOTH-ON
THE IRON CEMENT OF 1000 USES

Mention Item NED-8989 when writing

Viking
• THE ORIGINAL COMPOUND SHEAR

APPLIES THE STRENGTH OF *20* MEN AT THE BLADE

Cuts without kinking as easily as a tailor's shears thru cloth.
- Cuts Band Iron
- ¼" Brass (any width)
- Copper, Sheet Iron Tin, Band Saws (any thickness or width)
- 12 Gauge Bessemer Steel

OVERALL LENGTH 34" • WEIGHT 22 LBS.
IMMEDIATE DELIVERY $27.00 Net

VIKING SHEAR COMPANY
1057 W. 19th ST. • ERIE, PA.

Mention Item NED-8990 when writing

88% EASIER LIFTING ON INDUSTRIAL JACKING JOBS!

WITH SIMPLEX HEAVY DUTY SCREW JACKS

An entirely new principle on Simplex Screw Jacks cuts friction 88%—gives you faster, easier lifting. Concave inner surface of non-slip cap rests on large chrome-moly steel ball in hard steel ball-seat. Can't flatten under load. Cap has 9 degree self-leveling float—won't slip out under load.

Other features make these Simplex jacks safer on heavy-duty jobs. Tough, malleable iron housing. Broad malleable iron base for stability. Safety peephole in base. Color indicates jack capacity. High carbon steel bars 40% stronger than ordinary bars.

21 models with 4-way head—10 models with ratchet head. Capacities from 10 to 24 tons. Ask for new illustrated bulletin: Industrial 48.

Simplex LEVER - SCREW - HYDRAULIC Jacks

TEMPLETON, KENLY & CO.
1010 South Central Avenue, Chicago 44, Illinois

▲ Mention Item NED-8991 when writing ▲

Tramp iron can and does cost a lot of Money! It causes Fires and Explosions . . . it Damages or Destroys Valuable Machinery.

Eliminate your "TRAMP-METAL" before or during processing with HOMER "non-electric", Permanent Plate Type or Pulley Magnetic Separators. HOMERS are PERMANENT . . . they require no wires or electrical accessories and are "self-insulating" when mounted on conductive material. Write for bulletins today.

PRODUCERS OF MAGNETIC SEPARATOR EQUIPMENT SINCE 1923

The HOMER Manufacturing Co., Inc.
DEPT. 1-25
LIMA · · · OHIO
PERMANENT MAGNETIC SEPARATORS — PLATE TYPES AND PULLEYS

▲ Mention Item NED-8992 when writing ▲

NO EXTRA VALVES To Buy With This Unique Bellows AIR CYLINDER

HERE is an air cylinder complete in itself. Valve, valve operating lever, and piston stroke speed controls are built-in — integral parts of the Air Cylinder. There are no extra valves to buy. No cumbersome piping to install. Only one air connection is required which may be flexible hose.

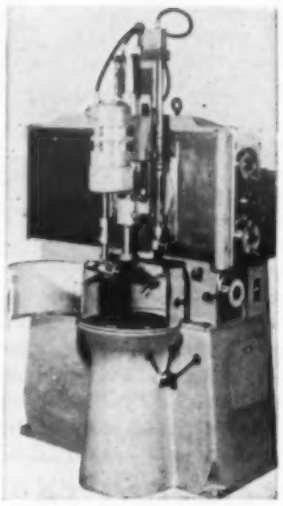
Known everywhere as the Bellows Air Motor, this compact power unit provides new versatility in the use of air.

Write for Bulletin BNED 22

The Bellows Co.
AKRON, OHIO

▲ Mention Item NED-8993 when writing ▲

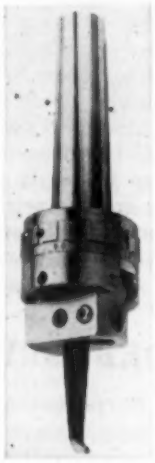
VERTICAL GRINDER



Hydraulically operated TR series vertical universal grinders are available in two sizes with swing capacities up to 32 inches in diameter and nominal grinding capacities of 24 inches in diameter. Since work is laid on solid foundation, visibility is improved, setup facilitated and vibration reduced. Swiveling wheel head slide, solid adjustable stops, variable feed, tarry control and facing feeds provide precision control. This is particularly true where several consecutive operations are completed in one setup of work involving combinations of internal, external, face, shoulder and angular grinding. Made by **Springfield Machine Tool Co.**, 402 W. Madison St., Springfield, O.

▲ Mention Item NED-8994 when writing ▲

BORING TOOL



Available in models No. 30, No. 31 and No. 32 which have maximum boring bar capacities of ½, 1 and 1½ inches respectively, improved line of E-Z Set boring tools covers boring range of from ⅜ to 20 inches. Improvements include elimination of gib in locking tool block dove-tail, hard chroming of all wear surfaces and flash chroming of all other tool parts to provide protection against corrosion. Wide capacity range of tools is made possible by three-position feature for boring bar in head. Accurate adjustment is facilitated by well-spaced calibrations on micrometer type dial. Tools are universally adaptable in that shanks are interchangeable, and they can be used in any jig boring machine, milling machine, boring mill, automatic or other machines. Made by **Maxwell Co.**, 390 Broadway, Bedford, O.

▲ Mention Item NED-8995 when writing ▲

SWIVEL FIXTURE HANGER

This type SSH safety swivel hanger is intended for industrial lighting installations employing extra heavy fixtures which require properly anchored swivel attachment to assure safety and carry necessary weight. With this hanger, weight of entire suspended unit is borne by fixture stud. Hanger is furnished with steel plate to serve as cover for either 4-inch octagonal boxes 1½ or 2⅛ inches deep or 1½ to 4-inch deep concrete boxes. It is supplied with either ½ or ¾-inch hub for pendant fixtures. Made by **Appleton Electric Co.**, 1758 Wellington Ave., Chicago 13, Ill.

▲ Mention Item NED-8996 when writing ▲

WIRE PARTITIONS IN STOCK SIZES are actually less expensive than wood in final cost. They permit free circulation of air, heat and light . . . are easily installed or rearranged, yet are more durable than wood. Ideal protection for materials, tools and as shop separations. Definite savings in price because made in standard stock sizes . . . much less expensive than special made-to-order partitions. These stock sizes will fit 99% of cases. Write today for new colorfully illustrated book dealing with wire products.

LOGAN CO., INC., Bldrs. Iron Div., 1000 Franklin St., Louisville 6, Ky.

LOGAN Wire Partitions

▲ Mention Item NED-8997 when writing ▲

▲ Mention Item NED-8998 when writing ▲

Is your cut-off time too high?

. . . Try a WELLS No. 8 with Wet Cutting System

CAPACITY:
Rounds . . . . . 8" dia.
Rectangular . . . . . 8" x 16"
With special guides . . 5" x 24"
WEIGHT: Approx. . . . 665 lbs.

WHATEVER the job—rounds, squares, tubing or odd shapes—the Wells No. 8 Metal Cutting Band Saw will hold your cut-off time to a minimum. For production or general utility this saw has the speed, accuracy and versatility to pay for itself. The wet cutting system is an economical extra that makes possible higher cutting speeds and lower operating costs. See your Wells Saw dealer or write us for full details.

Wells

Products by Wells are Practical

METAL CUTTING BAND SAWS

WELLS MANUFACTURING CORPORATION
1313 HARDING ST., THREE RIVERS, MICHIGAN

▲ Mention Item NED-8999 when writing ▲

Improve Your Storage Efficiency by Floor-to-Ceiling Stacking . .

WITH "Weld-Bilt" ELECTRIC PORTABLE ELEVATOR

It's easy to stack ceiling-high when you have a WELD-BILT Elevator on the job. Saves valuable floor space, increases your production space, and improves the working efficiency of your storage facilities.

WELD-BILT Portable Elevators are available in a wide variety of sizes and types: single or double telescoping, hinged types, electrically or hand operated. Our WELD-BILT engineers can quickly build a special adaptation to fit any unusual needs you may have.

WELD-BILT Portable Elevators are saving their cost in industrial plants everywhere. They may do the same in your plant. Write for catalog and complete details.

★ ★ "Weld-Bilt" PRODUCTS ★ ★

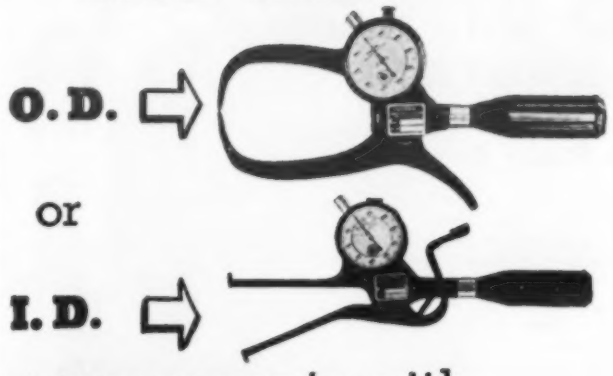
Other WELD-BILT Products—Hydraulic Lift Trucks • Two-Wheel Trucks • Platform Trucks • Pallet Trucks • Skid Platforms • Tiering Machines.

WEST BEND EQUIPMENT CORP.
220 WATER ST., WEST BEND, WISCONSIN
MATERIALS HANDLING ENGINEERS

▲ Mention Item NED-9000 when writing ▲

FEDERAL

Now take



measurements with

DIAL-INDICATOR ACCURACY

These Caliper Type Indicating Gages are fast, handy and convenient to use—adaptable to all kinds of rough checking. *You get your reading at a glance.* Jaws of special shapes and lengths permit checking around obstructions and in places inaccessible to other gages. Minimum graduations of indicators—.010" or 1.64".

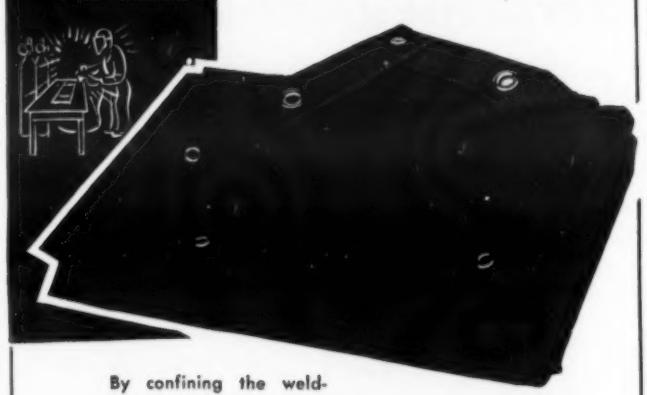
Here is a definite demonstration that the speed and efficiency of Dial Indicator Gaging pays out *even when dimensions need not be exceedingly precise*... Let us send you illustrated Bulletin #74.

We make Dial Indicator Gages — regular and custom-built — for use in hundreds of industries. If you will send us blueprints of work to be measured, we will gladly recommend the proper gage — without obligation.

FEDERAL PRODUCTS CORP., 1144 Eddy Street, Providence, R.I.

▲ Mention Item NED-9001 when writing ▲

COVERS THE DANGER AREA



By confining the welding operation to a given area, workers and passers-by are protected from harmful rays given off by welding operations. Also serve as a protective shield against flying chips and scale. Made of special flameproof and waterproof canvas—or asbestos—complete with eyelets for suspending on rod or pipe support.

SALVAGE COVERS AND FIRE BLANKETS ALSO AVAILABLE

Write for Bulletin L-128

IPCO *Safety Equipment for all Industries*

INDUSTRIAL PRODUCTS COMPANY

2807 N. FOURTH STREET • PHILADELPHIA 33, PA.

▲ Mention Item NED-9002 when writing ▲

Welding IS EASIER, MORE PROFITABLE with TRINDL ARC WELDERS

MODEL 125A WELDER

A Big Money Saver For Any Shop

Only $69.50 F. O. B. Factory

Complete-Ready-To-Operate

SAVES TIME • REDUCES COSTS • INCREASES PROFITS!

This exclusive, easy-to-operate TRINDL WELDER is a big saver for any shop . . . MODEL 125A is ruggedly built . . .Can easily be carried right to the job and connected to any convenient properly wired 110 volt 50-60 cycle AC supply line . . . With it you can BUILD OR REPAIR auto and home appliances, farm implements and tools . . Fabricate special shop equipment, jigs and fixtures out of prime or scrap sheets, bars and tubes and do hundreds of other repair and construction welding jobs when you need them and as you want them done. MODEL 125A has 16 heat stages ranging from 20 to 125 amps, handles 1-16" to 5-32" rods . . . Comes Complete Ready to Operate—Nothing Else to Buy. Also available for 220 and other voltages at slight additional cost.

TRINDL WELDERS HAVE PAID HANDSOME PROFITS TO THOUSANDS OF SATISFIED USERS—TRY ONE YOURSELF AND BE CONVINCED!

DEPENDABLE TRINDL WELDERS, WELDING SUPPLIES & ACCESSORIES are Available to Save You Both . . . Time and Money

Wire, write or phone today FOR PARTICULARS AND CATALOGS

Jobber and Distributor Inquiries Invited.
Write for Selected Distributor Plan

Trindl "JOB-TESTED" ARC WELDERS

TRINDL PRODUCTS LTD.
17 E. 23rd St. NA128 Chicago 16, Illinois

A RANGE OF MODELS FOR EVERY WELDING JOB!

▲ Mention Item NED-9003 when writing ▲

PRECISION LAPPING MACHINE

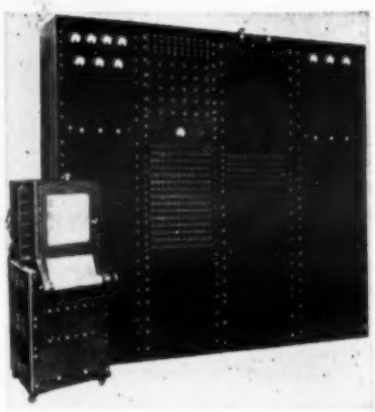
Applicable to production runs or individual jobs, Lapmaster lapping machines will produce finishes of 1 to 3 micro-inches root mean square. Work handled in one operation can be of different sizes, shapes and heights. Machine embodies continuously agitated compound tank, alloy iron lapping plate driven by gear reduction motor, and combined work holders and wear rings which are held in place by adjustable bars. Lapping time cycle is controlled automatically by clock which stops lapping plate and closes compound valve at end of predetermined period.

When motor is started, solenoid valve opens to allow lapping compound to run down feed wire onto lapping plate where it is distributed evenly by rotation of work holders. Wear rings and work holders rotate within their own orbit on face of lap. Lap rotates under work which is free to rotate on its own axis in work holders. This free motion generates uniform abrading action to produce concave, convex or flat lapping to specified tolerances.

Illustrated model No. 12 has 12-inch lapping plate and three wear rings. Other sizes have 18, 24, 36, 42, 48 and 72-inch plates. Made by **Crane Packing Co.**, 1816 Cuyler Ave., Chicago 13, Ill.

▲ Mention Item NED-9004 when writing ▲

ELECTRONIC COMPUTER

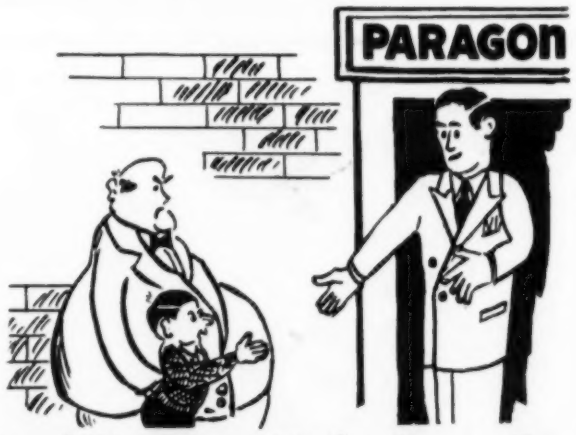


Capable of solving intricate industrial and research problems, this Reac high-speed electronic computer is reasonably priced and makes mathematical explorations into fields of scientific analysis economically feasible. It can be used for rapid dynamic solution and analysis of simultaneous differential equations. As simulator, it can be used to check design characteristics of new machines or systems to evaluate trial and error methods. When used as tester, computer will check equipment to determine whether or not design will meet actual field conditions.

Device consists of twenty electronic amplifiers for summing and integrating. Initial conditions and problem variables are set in on vernier dials that are connected to precision potentiometers. Problem is set up by means of telephone type patch cords that interconnect various amplifier inputs and outputs. Final solution is recorded on six-channel recorder. Made by **Reeves Instrument Corp.**, Dept. REAC-NED, 215 E. 91st St., New York 28, N. Y.

▲ Mention Item NED-9005 when writing ▲

PARAGON



Send Us Your Little Ones, Too!

Sure, we're well equipped to take care of your big orders for all kinds of springs ... BUT, we also are just as happy to fill your small orders, too.

Knowing what a headache it is to get small orders filled, we have set up a special small order department to meet your requirements.

Paragon offers a complete spring service — coil springs, wire forms and flat springs of all materials to your specifications, in any quantity, standard or special.

Your inquiries are invited. Send specifications for quotation. Write for special Spring Kit offers.

PARAGON SPRING COMPANY

4613 West Fulton St., Chicago 44, Ill.

▲ Mention Item NED-9006 when writing ▲

REMOVE

SCALE, SLUDGE, RUST

and other accumulation... with **AURAND CLEANING TOOLS**

FOR ANY HARD SURFACE: IRON—STEEL—BRICK—CONCRETE—ETC.

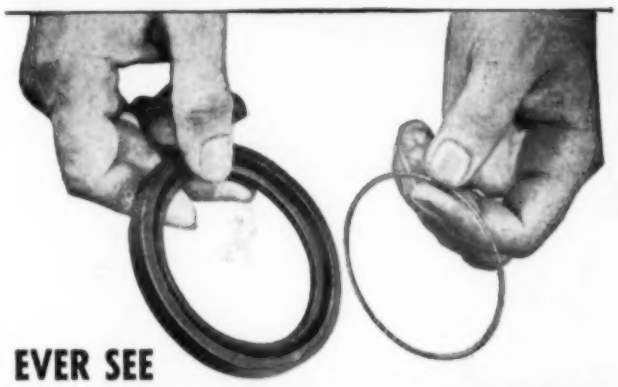
It's easy to remove paint, scale, rust and other accumulations with AURAND Cleaning Tools. Powered, rotary chipping does a thorough cleaning job in less time. No special skill required. Even depth surface is assured by an adjustable shoe control. Cutter heads are renewable.

For further information write Dept. 14

AURAND MFG. & EQUIP. CO.

2643 Colerain Avenue • CINCINNATI, OHIO

▲ Mention Item NED-9007 when writing ▲



EVER SEE AN OIL SEAL AS SIMPLE AS THIS ONE?

The Johns-Manville Clipper Seal consists of only two parts —a one-piece molded body and a specially designed garter spring, factory-assembled into a single compact unit.

This simple design provides advantages not found in most conventional-type oil seals. It permits unusual compactness in designing oil seal cavities. It allows greater bore tolerances —since no metal case is used. It offers high corrosion-resistance—since Clipper Seal's body is entirely non-metallic.

Clipper Seals are made in both split and endless types and are available for shafts up to 66" in diameter. They are recommended for sealing against oil, grease, water, air, grit and coolants at operating temperatures up to 450°F.

For further information, write for brochure PK-31A. Address Johns-Manville, Box 290, New York 16, N. Y.

Johns-Manville PACKINGS & GASKETS

▲ Mention Item NED-9008 when writing ▲

The white bonded finish on the tape of Brite-Blade protects it against rust and corrosion—it's actually a *permanent* porcelain-like finish that will not crack or peel even when it's bent or folded. Jet black graduations contrast sharply with its white background and make for easy visibility. Case of chrome-plated zinc alloy. Withstands roughest treatment —a favorite among men who are unusually hard on steel tape rules. 6 and 8 ft. lengths.

The STEEL TAPE That Laughs at Dampness!

Blades replaceable. See your hardware dealer or use coupon.

MASTER

REG. U.S. PAT. OFF.

WOOD AND STEEL TAPE RULES

MASTER RULE MFG. COMPANY, INC. C-12
201 Main Street, White Plains, N. Y.

Gentlemen: Please send me ☐ 6 ft. Brite-Blade ($1.75)
☐ 8 ft. Brite-Blade ($1.90). Check, Money Order is enclosed.

NAME .....
ADDRESS .....
CITY ..... STATE .....

▲ Mention Item NED-9009 when writing ▲

Any Speed You Want from 0-1750 rpm

REVERSIBLE

VICKERS VARIABLE SPEED Hydraulic Transmission

LIST PRICE $80.00 ½ Horsepower

The Vickers Variable Speed Transmission is ideally suited to many fractional horsepower rotary machinery drives. It may be started under full load torque from zero rpm in either rotative direction, without mechanical changes. Overload protection permits the unit to be stalled without damage.

3667

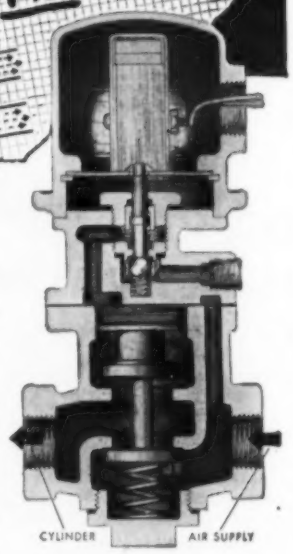
VICKERS Incorporated
DIVISION OF THE SPERRY CORPORATION
1456 OAKMAN BLVD., DETROIT 32, MICH.

Ask for Bulletin No. 47-40 and quotation

▲ Mention Item NED-9010 when writing ▲

Install Ross-In-Line for a Full-Flo Line!

THIS
NOT THIS



Solenoid-Pilot Sections Interchangeable on all 16 Ross-In-Line Bodies

Full Pipeline Capacity

LOW INITIAL AND OPERATING COSTS

Ross-In-Line valves solve your "on-and-off" problems. Provide instant shut-off, plant-wide or a single coolant line . . . or split-second control of a single acting cylinder. Air controlled, pressures to 125 p.s.i. . . . air, liquid, gas. A *better* job at lower cost.

Here's Why . . .

• FULL LINE CAPACITY . . . Full pipe size opening through valve. Eliminates pinching, reduces friction loss. • LOW FIRST COST . . . More capacity—thus more efficiency—per dollar. Quick, straight line installation. No brackets. • LOW OPERATING COST . . . Four moving parts, non-corroding. Inspection without removal from line. Solenoid consumes only .2 amp. holding, 1.2 amp. inrush.

Designed and built to stand up; Hycar seals, naval brass and stainless steel parts. Specifically for efficient air operated control, straight-way and 3-way, normally open or closed, ¾" to ⅜" pipe capacity.

Write for details and name of representative in your area.

ROSS OPERATING VALVE CO.

120 E. Goldengate Ave., Dept. 161 Detroit 3, Mich.

▲ Mention Item NED-9011 when writing ▲

A New Dust Collecting Unit in "One Complete Package"

Parsons "GEM"

now offers a brand new Dust Control Unit designed to collect dust from individual machines or from several concentrated dust areas. Four sizes filter dust from air at rates of 550 to 1,350 CFM, offering complete dust collection, effective bag cleaning and easy dust removal. All units comply with Health Department regulations.

Features of GEM Dust Collector

Simple, compact, low-priced • Many features of larger equipment • Positioned close to point of need • Large filter cloth area • Easily installed and moved • Long life . . . minimum servicing • Shipped assembled.

Write for FREE Booklet "MASTERY OF THE AIR"

Parsons ENGINEERING CORP.
CREATIVE ENGINEERS MANUFACTURERS
2545 EAST 79th STREET, CLEVELAND, OHIO

▲ Mention Item NED-9012 when writing ▲

ELECTRIC NUT SETTER

In addition to tightening or removing nuts, bolts, studs and lag screws, Speed-O-Matic electric impact nut setter can be used effectively for drilling, tapping and similar operations. Since it will not twist in operator's hands when nut becomes tightened, it provides for easy, safe operation with minimum fatigue to operator. It drives nut at 1750 revolutions per minute at free speed. At point of resistance, impact unit delivers 3000 impact blows per minute and tightens to torque of over 200 foot-pounds on ¾-inch bolt. It is instantly reversible for removing bolts or nuts. Universal model operates on 110-volt, 60-cycle alternating current or direct current, and high cycle type operates on 220-volt, 180-cycle, 3-phase alternating current. Distributed by **Speed-O-Matic Sales, Inc.**, 4639 W. Washington Blvd., Chicago 44, Ill.

▲ Mention Item NED-9013 when writing ▲

PRESSURE INDICATOR

Incorpating three 72-inch long scales, this Atcotran three-channel pressure indicator can be used with one or group of pressure measuring cells such as Bourdon tube, bellows or differential bellows for flow. Unit transmits intelligencies to one focal point for accurate reading. Three bands can be calibrated either linearly for any range required or in square root scale for flow. Selection of band is made from switches on front of case.

Dead beat response with 5000 positive motor-driven positions is feature. Accuracy is within 0.25-per cent of reading, and zero adjustment is accomplished with screw on front of case. Unit is particularly suitable for such applications as in refinery distillation still where it is important to have close check of pressures from numerous points in process. Made by **Automatic Temperature Control Co.**, 30 E. Logan St., Philadelphia 44, Pa.

▲ Mention Item NED-9014 when writing ▲

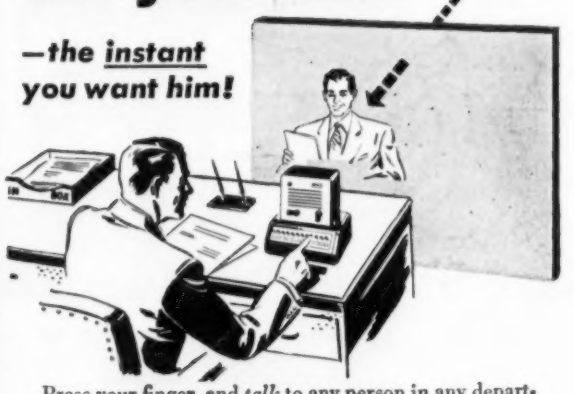
DO YOU KNOW?

■ XEROGRAPHY is dry process which uses electrostatic principles to take pictures, reproduce documents and to print on virtually any surface. A new, simple and compact xerocopying machine that will quickly reproduce copies of letters, documents, engineering drawings and line work will be announced soon by Haloid Co., 413 Haloid St., Rochester 3, N. Y.

▲ Mention Item NED-9015 when writing ▲

Get your man

—the instant you want him!



Press your finger, and *talk* to any person in any department! That's what you can actually do with Executone *electronic* Intercommunication. Executone is a whole new way of doing business! Executone's instant voice contact knits departments closer together than they've *ever* been — saves more time than you believed possible — gets so much more work done, it soon pays for itself! Get all the facts about Executone—

For Further Information write Dept. M-5

Executone
COMMUNICATION & SOUND SYSTEMS
415 Lexington Ave., New York 17, N.Y.

▲ Mention Item NED-9016 when writing ▲

3 Beat Competition! WITH New MUNTON Hydraulic Press Brake

Readily makes 90° bends in mild steel. 10-ton press handles 18 gauge stock 3 ft. long, 14 gauge 2 ft. long, 10 gauge 1 ft. long. 20-ton press handles 12 gauge stock 3 ft. long. 30-ton handles 10 gauge 3 ft. long. Munton 10-ton unit with spring return, shown, is for forming only, unless die sets have springs. Dual cylinder press brake (pressure down and up) is recommended for punching, broaching, pressing. No need now to tie up large, costly equipment for small jobs. Ample clearance for large variety of work. Quickly converted to press. Let a Munton Hydraulic Sales Engineer explain in detail. Send for bulletin.

MUNTON MANUFACTURING CO.
9403 W. BELMONT AVENUE
FRANKLIN PARK, ILLINOIS

▲ Mention Item NED-9017 when writing ▲

At 9 out of 10 of the largest and most important decision points in American industrial purchasing, MacRAE'S BLUE BOOK is used as a reference source "principally" or "exclusively."

Send for your copy of a new survey result booklet, "Where Orders Originate."

MacRAE'S BLUE BOOK
18 E. Huron Street, Chicago 11, Illinois

▲ Mention Item NED-9018 when writing ▲

THE NEW IRONBOUND RolTruk LIFTS GRIPS & CARRIES PAPER ROLLS, KEGS, REELS

● The RolTruk easily lifts and moves heavy cylindrical objects, yet is non-complicated in design. One of the features is the hold-down arm which securely grasps the roll in a vise-like grip and finger-tip release catch must be manually disengaged before the roll can be released. Thus accidents are prevented and damage to product is eliminated. The RolTruk can be adapted to handle many items. If you have a cylindrical product write the Ironbound engineering department. Recommendations made without obligation.

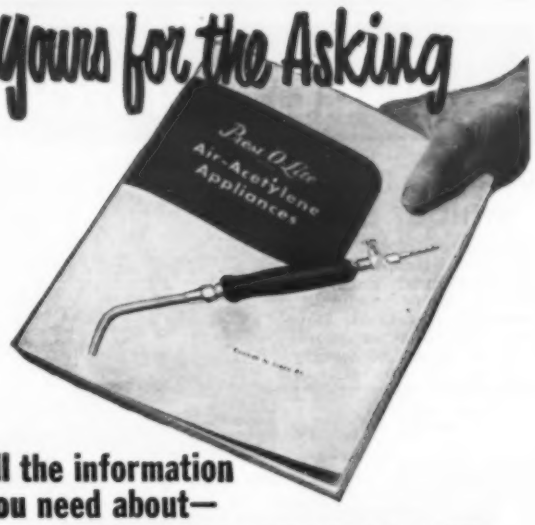
IRONBOUND
BOX & LUMBER COMPANY
Materials Handling Division
55 HOFFMAN PLACE • HILLSIDE, N. J.

Ironbound

SEMI-LIVE SKIDS
SKIDS • DOLLIES
FLOOR TRUCKS

▲ Mention Item NED-9019 when writing ▲

Yours for the Asking



all the information you need about—

SOLDERING, HEATING, AND BRAZING EQUIPMENT

How to make up an outfit to meet your exact needs.

Where and how PREST-O-LITE Appliances save time and money . . . do better work.

YOUR COPY IS READY NOW—

SEE YOUR Prest-O-Lite JOBBER

or write to THE LINDE AIR PRODUCTS COMPANY
Apparatus Sales Division, 30 E. 42nd St., New York 17, N. Y.

"Prest-O-Lite" is a trade-mark of a Unit of Union Carbide and Carbon Corporation.

▲ Mention Item NED-9020 when writing ▲

Here's a welting to give added *good looks* and *longer wear* to your slip covers! Here's why CHEMCLAD Plastic Welting will build customer good will and peak profits, *for you*—

- Outlasts any existing coated cloth welting.
- Adds the modern, "better made and more expensive" look.
- Has no fibrous backing to become wear-exposed.
- Drapes and handles easily for any sewing.
- In bright colors (contrasting color schemes only).
- *Costs the same or less* than the welting you are now using!

Also . . . ANY AND ALL PLASTIC EXTRUDED SHAPES . . . No matter what your requirements in extruded plastics are, we can serve you. We invite the inquiry of all fabricators.

CAROLINA INDUSTRIAL PLASTICS Corp.

CHEMCLAD *Plastic Products*

MOUNT AIRY, NORTH CAROLINA

▲ Mention Item NED-9021 when writing ▲

Eye Protection Can Feel Good and Look Good

Style BS Metal Frame with saddle bridge and side shields.

These safety spectacles with either metal or plastic frames feel good because they fit any type of face with that "made-to-order" look. Comfortable fit is assured by their light weight and the variety of bridge widths and lens sizes available. They are furnished with or without side-shields, and fitted with WILLSON Super-Tough*, flat or curved lenses for ample protection on many heavy-duty operations.

Style A Metal Frame with rocker nose pads.

Styles WP and WPS Plastic Frames with and without sideshields.

WILLSON

For complete information on these products get in touch with your nearest WILLSON distributor or write us direct.

*T.M. Reg. U. S. Pat. Off.

WILLSON PRODUCTS, INC., 113 N. SECOND ST., READING, PA.

▲ Mention Item NED-9022 when writing ▲

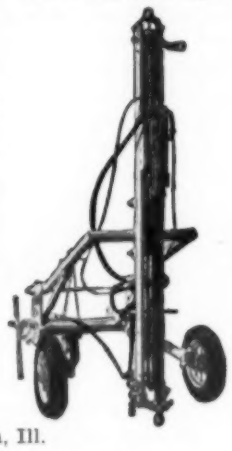
AIR HOSE VALVE

General purpose air hose valve and nozzle requires but little thumb pressure to open and instantly snaps shut when actuating plunger is released. It employs stainless steel ball which is forced into high velocity air stream and thence into seat. Valve is opened by plunger which rolls ball out of seat and air stream. Working parts are polished stainless steel, and seal is positive packless O-ring type. Valve can be used on any air line up to 100-pound per square inch pressure and is available for ⅛ and ¼-inch hose sizes with body tapped for standard ¼-inch pipe threads. Made by **Paul Valve Corp.**, 683 Third Ave., New York 17, N. Y.

▲ Mention Item NED-9023 when writing ▲

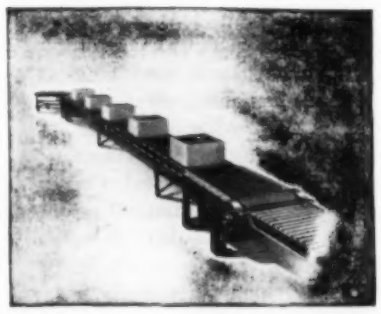
PNEUMATIC WAGON DRILL

Holes can be drilled in rock or other materials readily with this model BW-1 wagon drill. It employs model 105 Thor 1¼-inch Drifter rock drill that features single reversible pneumatic motor. This feeds and raises drill so that no hoist is needed. Motor driven feed also permits throttle control for any required speed of drilling. Mast can be swung 360 degrees vertically or horizontally. By using tubular frame of rig as air receiver, air line pulsations are eliminated and continuous pressure is exerted against rock bit to prevent rebound. Drill steel centralizer simplifies collaring of holes. Nominal steel change is 6 feet, and actual feed travel is 8 feet. Made by **Independent Pneumatic Tool Co.**, 175 State St., Aurora, Ill.



▲ Mention Item NED-9024 when writing ▲

POWER BELT CONVEYOR



Designed for horizontal application in handling cartons, boxes, bags and parts, this Power-Veyor is available in sizes having belt widths of 8, 12, 14 and 20 inches. Conveyor, in lengths up to 150 feet, can be either permanently or semipermanently installed. System consists of drive section with motor and drive pulley; intermediate sections of gravity conveyors; and take-up section. Conveyor can be powered by ⅓, ¾ or 1-horsepower motorized drive and will handle distributed loads of 1200, 1700 and 2040 pounds respectively. Made by **Rapids-Standard Co.**, Dept. P-156, 342 Rapistan Bldg., Grand Rapids 2, Mich.

▲ Mention Item NED-9025 when writing ▲

PARE YOUR COSTS

—In Metals and Plastics Finishing

—In Plant-Machinery Maintenance

NOW!

Look into the cost savings you'll get with rubber - and - abrasive Brightboy, which CLEANS, BURRS, FINISHES, POLISHES, *in one operation!*

Brightboy covers a wide range of finishing requirements. The soft rubber "cushions" the abrasive, giving exacting control in precision work. It frequently achieves the final polish, bridging all the steps following the heavy grind right through the buff.

Be sure to ask your dealer to give you the Brightboy Catalog-Manual. Our Service Department will be glad to offer methods-setup suggestions, and solutions to specific job problems.

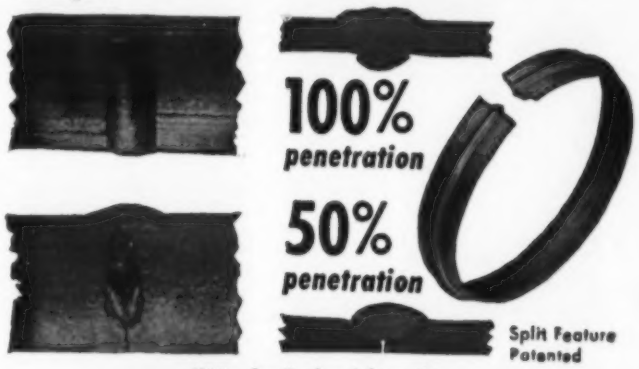
WELDON ROBERTS Brightboy — BURRING · FINISHING · POLISHING IN ONE OPERATION

BRIGHTBOY INDUSTRIAL DIVISION
Weldon Roberts Rubber Co.,
Newark 7, N. J.

▲ Mention Item NED-9026 when writing ▲

WEDGE Split CHILL RINGS assures 100% PENETRATION in welding PIPE, TUBE or PARTS

The outstanding and important fact about WEDGE Chill Rings with the patented SPLIT Feature is that in welding pipe, tube or parts they make STRONGER joints. The use of WEDGE Chill Rings REINFORCE the joints and assure 100% PENETRATION of the entire circumference. If you weld pipe, tube or parts find out how WEDGE Chill Rings can do a better job for less money. Why not investigate?



Write for further information.

WEDGE PROTECTORS, INC.
3973 Jennings Road Cleveland 9, Ohio

Use WEDGE Chill Rings-Thread Protectors

▲ Mention Item NED-9027 when writing ▲

It's Powered Right when It's Powered by Briggs & Stratton

The dependability and efficiency of "powered" equipment depends on the engine that drives it.

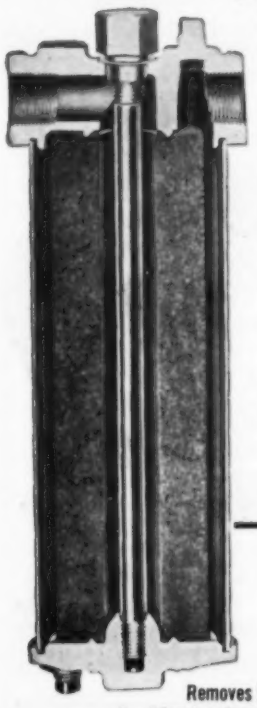
Specify Briggs & Stratton 4-cycle, air-cooled engines. It's the right power for the most exacting requirements. No other single cylinder, air-cooled, gasoline engine gives you the same value, performance, and dependability.

BRIGGS & STRATTON CORPORATION
Milwaukee 1, Wis., U. S. A.

4 CYCLE BRIGGS & STRATTON GASOLINE ENGINES — World Wide FACTORY SUPERVISED SERVICE

▲ Mention Item NED-9028 when writing ▲

Can you afford to keep replacing



Filter Cartridges So Often?

Not when you can cut replacements in half with Cuno MICRO-KLEAN—filters and cartridges. New, exclusive "Graded-Density-in-Depth" gives extra capacity for collecting dirt of micronic size and prevents surface loading. Resinous impregnation and polymerization prevents channeling or rupture. Result—positive clarification at minimum cost.

Filter capacities from a few to 850 gpm; cartridges fit other makes; special lengths for built-in installation. Making the broadest line, Cuno is *your* best source for unbiased recommendations on fluid filtration.

FREE bulletin. Address: Cuno Engineering Corp. 705 South Vine St., Meriden, Conn.

CUNO

Fluid Conditioning

Removes More Sizes of Solids from More Types of Fluids

Mention Item **NED-9030** when writing

meet the "steady grind" of this foundry

This is the *Torit* No. 122 Dust Collector. It handles a large volume of abrasive dusts efficiently. There is a minimum of piping, and the cleaned air is recirculated, reducing heat losses. It runs only when the grinders are operating, and is easy to keep clean.

Compact, self-contained *Torit* Dust Collectors will solve your dust problem. Moderately priced, they fit easily into present and future production layouts. Standard models, up to 5 H.P. are available for immediate delivery. For details and the latest Torit catalog, write:

TORIT MANUFACTURING CO.
298 Walnut Street St. Paul 2, Minn.

Mention Item **NED-9031** when writing

MAKE PEERLESS ELECTRIC *your* MOTOR DEPARTMENT

● When you bring your motor problems to Peerless Electric, you add a motor department to your plant facilities. Peerless is small enough to give individual engineering attention to your motor requirements—large enough to manufacture the motors you need in any quantity.

We can give you the same quick action on special motors that you could get in your own plant if you had a motor department—action that will give you promptly the information or samples you may need.

Single Phase
Polyphase
Direct Current Motors

THE PEERLESS ELECTRIC COMPANY • WARREN, OHIO
Manufacturers of Quality Motors for more than 55 years

Peerless-Electric MOTORS · FANS · BLOWERS

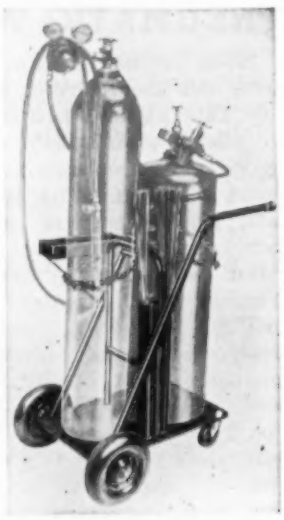
Mention Item **NED-9032** when writing

PRECUT ADHESIVE MASKS

Die-cut to any desired shape or size, adhesive masks are available for use in spray painting, sandblasting and tumbling operations on metal, glass, plastics, wood and other materials. Masks can be furnished on strips of liner from which they can be peeled as needed. They serve to eliminate hand cutting or applying stop-off materials, and therefore reduce preparatory time to minimum. Made by **Wiggins Airways,** Wiggins Mfg. Div., Neponset St., Norwood, Mass.

Mention Item **NED-9033** when writing

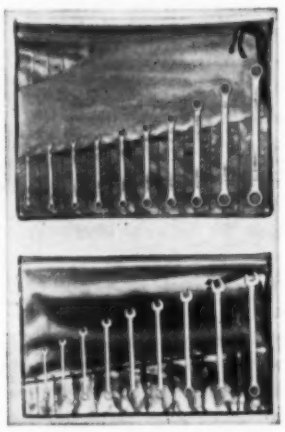
GAS WELDING CART



Equipped with two rubber-tired ball bearing wheels and two swivel casters, No. 1 Welder's Helper carrier transports gas welding equipment wherever needed without danger of tipping. It is easily steered around sharp turns, and when moving down inclines, it is braked by downward pressure on steering handles. Carrier can transport a 12-inch and a 9-inch diameter cylinder mounted front and back so that unit is narrow enough to move in restricted areas. Cylindrical welding rod containers hold adequate supplies of six different rods, and accessory box carries additional equipment. Fire extinguisher can be mounted below parts box. Made by **Gleason Corp.,** 532 N. Ninth St., Milwaukee 3, Wis.

Mention Item **NED-9034** when writing

LONG HANDLED WRENCHES



Furnished in longer than standard lengths, six Proto box wrenches and nine combination box and open end wrenches provide excellent leverage, holding power, clearance and reach needed on many types of mechanical assemblies. Double-end box wrenches, with openings from 5/16 to ¾-inch, have rounded shank edges for comfortable grip, chamfered openings on both sides, die-formed size markings, full polished heads and triple plating. Available with openings from ¼ to ¾-inch, combination wrenches have same features and in addition have slim tapered jaws on open end. Made by **Plomb Tool Co.,** Dept. D, 2209 Santa Fe Ave., Los Angeles 54, Calif.

Mention Item **NED-9035** when writing

you can LOWER DRILLING COSTS

...with **SCULLY-JONES STYLE "B" DRILL CHUCKS**

You can save 25% or more by replacing taper-shank with straight-shank drills and driving them with Scully-Jones Style "B" Drill Chucks, built to outlast many drills.

You get a positive drive as the milled flats on the shaft of the drill are engaged in the splined section of the chuck.

You reduce rejects. Bore and shank are concentric within .002", gauged at a distance equal to the projection of a standard drill from the chuck. This assures a true running tool.

You can get
IMMEDIATE DELIVERY
from our stock of all popular sizes

For complete details see pages 42–48 of Scully-Jones Tool Engineering Manual 500 or Slide-Type Selector No. 5 on Style "B" Drill Chucks.

Scully-Jones AND COMPANY
1952 S. Rockwell Street
Chicago 8, Illinois

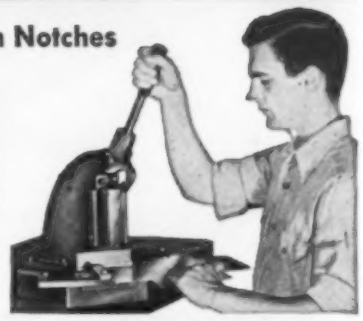
2716 NED

You Get Low Cost, Fast, Accurate Production with Our Standard and Special Tools

Mention Item **NED-9036** when writing

THE di-acro NOTCHER

Duplicates Precision Notches WITHOUT DIES!



The new precision DI-ACRO Notcher eliminates the need for punch press and dies on many production notching operations. It is also ideal for experimental work as it can be quickly adjusted for any size or shape notch. Many straight shearing operations can also be performed with this flexible unit.

CUTS CLEAN — NO BURRS OR ROUGH EDGES
The powerful DI-ACRO Notcher has an exclusive roller bearing cam design which provides a tremendous pressure with a small amount of effort. The precision-ground Vee-shaped ram and blades of alloy tool steel assure clean cuts and permanent accuracy.

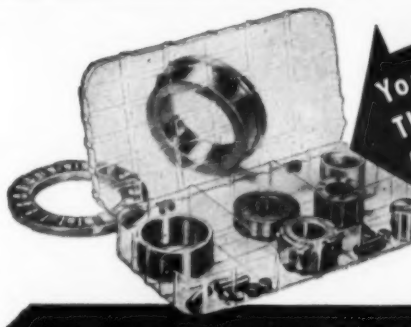
LARGE CAPACITY. The DI-ACRO Notcher cuts 90° notches up to 6" by 6" in 16 gauge steel in one operation. Larger notches, and wider or narrower angles, can also be obtained.

SEND FOR 40-PAGE CATALOG.
Gives full information on all six "DIE-LESS DUPLICATING" production boosters—DI-ACRO Benders, Brakes, Shears, Rod Parters, Punches, Notchers—with many examples of accurately duplicated parts.

DI-ACRO is pronounced "DIE-ACK-RO"

DI-ACRO PRECISION MACHINES DIE-LESS DUPLICATING
O'NEIL-IRWIN MFG. CO.
354 8th Avenue, LAKE CITY, MINN.

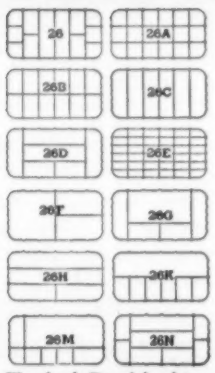
Mention Item **NED-9037** when writing



Your Choice of THOUSANDS of Arrangements...

Pyra-Shell Reg. U.S. Pat. Off. TRANSPARENT UTILITY BOXES

These handy utility boxes can be partitioned in an almost endless number of combinations to give you the exact arrangement you want. Sturdy, light-weight, dust-tight. Sizes from 3" x 2" x 1" to 13" x 6¾" x 1¾". Special boxes made to order.



Typical Partitioning

WRITE for CATALOG
Address Utility Box Dept. D

SHOE FORM CO. INC. AUBURN, N. Y.

Mention Item **NED-9038** when writing

REVOLVATOR GO-GETTER POWER LIFTRUCK

Add to your profits the GO-GETTER way. Silently, safely, efficiently, these dependable "mechanical men" cut time and labor in moving, loading, piling.

GO-GETTER Walk-along Electric Liftrucks have:

Finger-Tip Single Lever Directional Controls

Ball and Timken Bearings Throughout

Large Dual Differential Wheels

Heat-treated Stub Tooth 20° Spur Gear Running in Oil

SIX TYPES:

Low Lift Platform Skid
Low Lift Pallet
High Lift Counter-balanced Fork
High Lift Straddle Fork
High Lift Platform Skid
Tractor for Towing and Pushing

Send for Details

REVOLVATOR CO.
DESIGNERS AND MANUFACTURERS OF MATERIAL HANDLING EQUIPMENT
8732 Tonnele Avenue North Bergen, New Jersey

Mention Item **NED-9039** when writing

IT HASN'T QUITE COME TO THIS...

But

P-182 PUMP SURE TAKES THE WORK OUT OF

BENDING PIPE

Blackhawk's new Electrically-Driven Hydraulic Pump makes your pipe bending work a push over! A simple connection converts your hand-operated hydraulic Porto-Power pipe bender to effortless power operation. It is a complete "profit package" containing pump, reservoir, valves and controls.

A Product of BLACKHAWK MFG. CO. Dept. P14128 • Milwaukee 1, Wisconsin

Get full information on P-182 from your Blackhawk Industrial Supply Distributor.

BLACKHAWK

Mention Item NED-9040 when writing

Sandpaper Makes Music

ONE OF THE WORLD'S LARGEST manufacturers of record players uses Jewel *Natural* Garnet to bring out the beauty in the fine wooden cabinets. Jewel Garnet does a better job than synthetic grits . . . and does it faster.

JEWEL ABRASIVES are also used to finish phonograph records after they come out of the pressing machines. The rough flash on the edges is often taken off with a specially designed Jewel Flint Paper. And a manufacturer of trombones has found that a very fine grit Jewelox cloth is ideal for hand polishing trombones slides.

REMEMBER—there's a Jewel product for every sanding, polishing and grinding need.

Abrasive Products, Inc.

SOUTH BRAINTREE 85, MASSACHUSETTS · MAKERS OF JEWEL COATED ABRASIVES

Mention Item NED-9041 when writing

"JUST A SNAP" FOR BOTH AC AND DC

QUICK READINGS WITHOUT BREAKING CIRCUIT Instant current readings by merely placing the tongs around the electrical conductor—without breaking circuit or insulation. It's safe, convenient and accurate. Tong Test is the only ammeter of its type that can be used on both AC and DC. Cannot burn out for it has no windings. Interchangeable scale ranges up to 1000 amperes. Five types to accommodate cables up to 3 7/8", bus bars up to 4 1/2" x 1/2". Voltage readings, too, with the Voltor Attachment.

Write for Tong Test Bulletin ND-400

COLUMBIA ELECTRIC MFG. CO.

4525 Hamilton Ave., Cleveland 14, Ohio

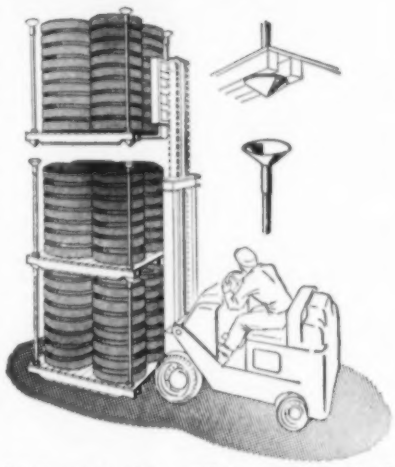
Mention Item NED-9042 when writing

WEEKLY WALL CALENDAR

In addition to featuring large readable dates on weekly tear pieces, this 1949 Post wall calendar presents details of 52 items which are designed for use by draftsmen, engineers and designers. Calendar sheet also includes current, prior and following month dates in smaller but easily read figures. Seven full pages of engineering reference data are included in this weekly wall calendar which is available free from **Frederick Post Co.**, Dept. MJ, P.O. Box 803, Chicago 90, Ill.

Mention Item NED-9043 when writing

PALLET TIERING DEVICE

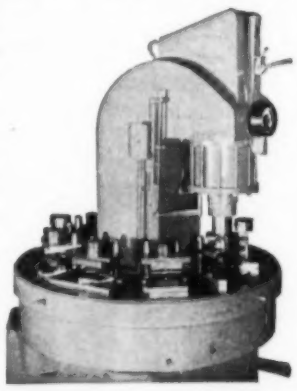


Flexible Paltier Steel Alignment Cone assembly facilitates stacking or tiering of single or double-face wood pallets. Cone assembly units are fastened at four corners of wooden pallets by means of adjustable locknut. These cones nest into similar cones, which are detachable from vertical supports, to provide positive, steady tiering. Cones are used on any size pallet, and vertical supporting tubes are supplied in three diameters and in any desired length to accommodate any materials or to meet specific requirements. Made by **Paltier Corp.**, 52 W. Jackson Blvd., Chicago 5, Ill.

Mention Item NED-9044 when writing

HYDRAULIC TURRET PRESS

Having large turret table that will accommodate numerous setups, Rettig hydraulic turret press provides for fast operation with practically no tear-down or set-up time. After fixtures are mounted, operator can change quickly from one to another for blanking, forming, drawing, wedging, assembling and other operations. Turntable is rotated manually. Press is available in 10, 20 and 30-ton sizes and can be operated automatically or manually. It is equipped with load gage, electric limit and overload controls, magnetic valve submerged in oil, magnetic pushbutton starter and Neoprene insulated electric wiring. Distributed by **Universal Air-Line-Joint Mfg. Co.**, Lafayette, Ind.



Mention Item NED-9045 when writing

Here Are the Blades

YOU CAN ALWAYS DEPEND UPON FOR MAXIMUM CUTTING PERFORMANCE

BARNES

● POWER
● HAND

Free! BARNES HACK SAW PRODUCTION CALCULATOR—SEND FOR YOURS TODAY!

ESTABLISHED 1919

W. O. BARNES CO., INC.

DETROIT 14, MICHIGAN

Mention Item NED-9046 when writing

TINS ALL METALS

Difficult tinning problems are being solved with a new powdered solder containing flux, called Farco Tinning Compound which permits jobs heretofore considered impossible, such as tinning cast iron water jackets and cylinder heads, cast steel bearings, pipes, cylinders and stainless steel equipment. The powerful chemical formula will lift the oxides from aluminum, and on other metals is more drastic than ordinary acids. Makes it possible to lift the scale and tin black iron in one operation. Stability of the new powder makes it possible to judge heat on large bearings by its action in turning liquid when proper temperature for tinning is reached. Although strong enough to remove scale, dirt, and tin rusty surfaces thoroughly, it does not produce harmful fumes nor will it burn the skin. When used on gasoline motors, Diesel and marine engine bearings it is reported to increase performance life 100%. The compound may be applied with either torch or soldering iron depending on thickness of metal, and any good grade of solder may be used. Packaged in 1½ lb. cans, price $3.00 f.o.b.

FARRELLOY CO.,

1246 North 26th St. Phila. 21, Pa.

Mention Item NED-9047 when writing

High Quality

STEAM HOSE

for Industrial Service

• FOUNDRIES • RAILROAD SHOPS
• MILLS • MINES
• REFINERIES • CONTRACTORS

The thick, heat resisting tube retains its flexibility under severest operating conditions. Tough, abrasion-resistant cover protects the hose from punishment and external wear. Lengths up to 50 feet. Wire wound where specified. Write today for sizes, weights and further data.

MECHANICAL RUBBER GOODS BY

REPUBLIC RUBBER DIVISION

REPUBLIC RUBBER DIVISION

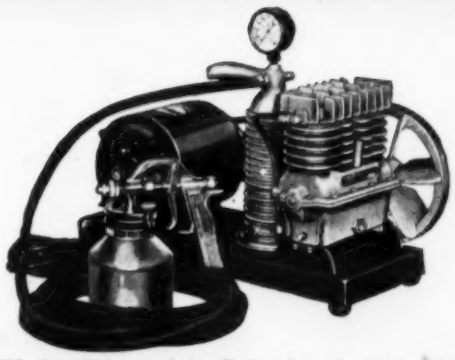
LEE RUBBER & TIRE CORPORATION, YOUNGSTOWN, OHIO

LEE DELUXE TIRES & TUBES, CONSHOHOCKEN, PA.

Mention Item NED-9048 when writing

PRESSURE QUEEN

FOUR CYLINDER PORTABLE AIR COMPRESSOR SPRAY PAINTING OUTFIT



PACKS the efficiency of 4 cylinders into the space usually required for a single cylinder. Has drop forged crankshaft; heat treated stainless steel valves; bronze bearings and forced feed lubrication. Delivers maximum 50-60 lbs. pressure free from pulsation.

The ideal air supply for machine shop, factory, garage, service station. Inflates tires; refinishes and lubricates automobiles, trucks, tractors and equipment, anywhere any time. Better, faster and cheaper than brush work for painting buildings. Indispensable for home and farm workshop.

Equipment includes the compressor, mounted as shown above, with belt, compressor pulley, air chamber, air gauge, 15 ft. hose and spray gun; powered by ⅓ or ½ h.p. motor or gas engine. Grease gun extra. Immediate delivery.

IF YOUR DEALER DOES NOT SELL PRESSURE QUEEN, WRITE DIRECT.

THE CAMPBELL-HAUSFELD COMPANY

193 RAILROAD AVE. HARRISON, OHIO

Mention Item NED-9049 when writing

A COMMANDER Production Tool

Why a Commander Tapper?

See us in Booth #941 at the Metal Show, Philadelphia Oct. 25-29

- Tapping capacity 0 to ¾" with one tapper.
- Torque control —may be adjusted to protect any size tap. This assures safe bottom-hole tapping.
- Spring clutch drive eliminates slippage and wear . . . provides smooth, quiet, positive operation.
- Compactly built — affords maximum visibility of tapping operation.
- Furnished to fit any Drill Press.

One COMMANDER TAPPER handles the range #0 to ¾"

Write for circular and name of your nearest Distributor.

COMMANDER MFG. CO.
4220 W. Kinzie Street Chicago 24, Ill.

Product of Commander-Builder of the Multi-Drill

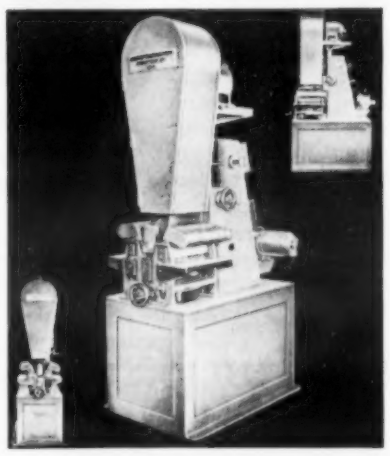
Mention Item NED-9050 when writing

EXTRA-HEAVY-DUTY CHUCK

Constructed for high rates of metal removal, line of extra-heavy-duty three-jaw geared scroll chucks includes serrated step-along jaw and American Standard tongue-and-groove jaw types. Chucks are available in 8, 10, 12, 15, 18, 21 and 24-inch sizes and fit 6-15-inch American Standard flanged spindle noses of any machine. Chuck body is high carbon steel, back plate is cast of high-test iron, and scroll is machined of alloy steel hardened to 430 brinell. Bronze bushings provide protection of wear points, and hardened-steel shouldered sleeve takes thrust and radial loads. Serrated jaw chuck has master jaws with limited travel, and reversible top jaws which are adjustable in ¼-inch increments provide for major adjustments. Made by **Warner & Swasey Co.**, 5701 Carnegie Ave., Cleveland 3, O.

Mention Item NED-9053 when writing

BELT TYPE POLISHER



Flat stock up to 10 inches wide can be polished and ground automatically by model 600 Curtis Straight-O-Matic abrasive belt machine. Polisher can be used as individual unit with belts of various grits or set up in tandem. Also, it can be supplied with inverted head so that stock can be finished on both top and bottom with one pass. Screw-adjusted feed rolls take stock of any thickness up to 1-inch at infinitely variable speeds ranging from 20 to 60 feet per minute. Straight-through arrangement permits feeding manually, by coil unwinding and winding machines, by conveyor belt and similar means. Machine is powered by 3-horsepower, 220/440-volt, 60-cycle alternating current motor. Made by Curtis Machine Corp.; distributed by **W. J. Holtmeier, Inc.**, Rm. 1003, 71 W. 23rd St., New York 10, N. Y.

Mention Item NED-9054 when writing

DO YOU KNOW?

■ APPLIED easily to desk top, wall or other convenient surface, functional decal combines 1949 calendar, linear ruler and pica ruler. This decalcomania is available free from Palm, Fechteler & Co., 220 W. 42nd St., New York, N. Y.

Mention Item NED-9055 when writing

HYSTER KARRY KRANE

$4,550.00 F.O.B. PEORIA

Lowest Priced...Most Productive ...Fastest Moving Self-Propelled 5 Ton Mobile Crane on the Market

You won't believe it until you see a Karry Krane performing your loading and unloading jobs under your own conditions. That's why we welcome an opportunity to demonstrate this self-propelled mobile crane with adjustable boom, pneumatic tires, and the ability to hoist and move heavy or bulky loads up to 10,000 pounds quickly, efficiently.

See your Hyster distributor for a Karry Krane demonstration. Write for literature.

HYSTER COMPANY

THREE FACTORIES
2906 N. E. Clackamas St., Portland 8, Oregon
1806 North Adams Street...Peoria 1, Illinois
1010-06 Meyers Street.....Danville, Illinois

Mention Item NED-9057 when writing

END CONVEYOR BELT TROUBLES

SAVE TIME, LABOR, MONEY, TROUBLE, with FMC Flat-top STEELBELT. Conveys bags, boxes, cans, and packages and products of endless variety. Made of 302 (18-8) stainless steel. Supplied in any length and in widths in multiples of even inches. Easy to clean, easy to splice. Allows free circulation of air, water, steam, etc.

SEND FOR FREE SAMPLE AND FOLDER "K"

FOOD MACHINERY AND CHEMICAL CORPORATION
ANDERSON-BARNGROVER DIVISION • SAN JOSE, CALIF.
SPRAGUE-SELLS DIVISION • HOOPESTON, ILLINOIS

Mention Item NED-9058 when writing

Send for Folder N
ROLOCK Incorporated
Fairfield, Connecticut

12RG48

Mention Item NED-9051 when writing

Your Sandblast Problems Answered IN THIS FREE FOLDER

WRITE FOR YOUR COPY TODAY

Department G
Sanstorm Mfg. Co.
Santa Clara and H Sts.
Fresno, California

Please send your free Sanstorm folder

Name.....
Address.....
City.....State.....

Mention Item NED-9052 when writing

The KALAMAZOO Metal Cutting BAND SAW

"TOPS" for Cutting Metal

If you want SPEED, ACCURACY and REDUCED PRODUCTION COSTS in cutting off metals to lengths this low cost tool makes a profitable investment.

Standard Model for intermittent cutting. Coolant Model (illustrated) for continuous production. Automatically cuts anything up to 8 x 16 inches, either solid, angular or tubular. Thousands of satisfied users.

Ask your dealer or ask for bulletin.

KALAMAZOO TANK & SILO COMPANY
KALAMAZOO 16 MICHIGAN
American Steel Export Co., New York City

Mention Item NED-9056 when writing

ONE MAN . . . ONE TRUCK . . . ANY NUMBER OF BODIES

DEMPSTER DUMPSTER

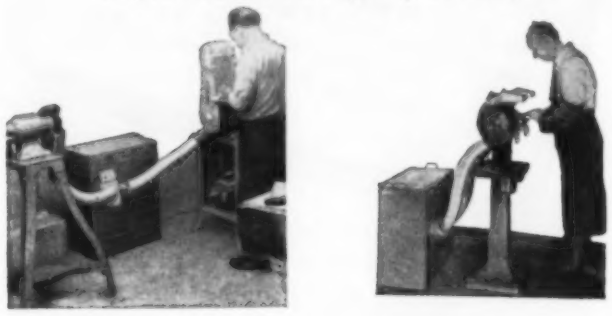
Any number of bodies from 1½ to 10 cubic yard capacity are quickly and economically handled by one man and one truck equipped with a Dempster-Dumpster Hoisting Unit shown above. Standard or special bodies, built to handle any type of materials, are placed at loading points and when loaded, are picked up, hauled and dumped . . . entire operation handled by hydraulic controls in cab . . . no wasted time by truck or driver. Cost of installing the Dempster-Dumpster System is surprisingly low. Savings in equipment and maintenance, and increases in production are tremendous. Write for catalog 247 now.

DEMPSTER BROTHERS, Inc.
4128 N. Knox Knoxville 17, Tennessee

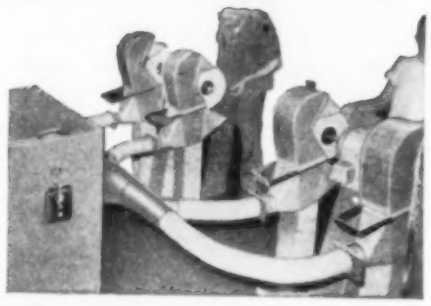
Mention Item NED-9059 when writing

STOP DUSTS

. . . with low cost, unit-type DUSTKOPS.
They're Ductless . . . quickly installed.



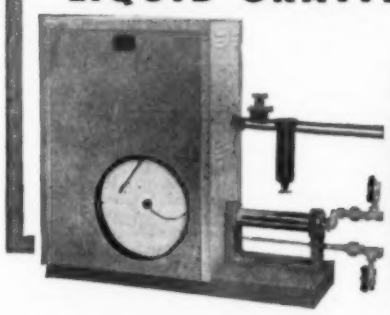
Send Now for Complete Information No obligation for recommendation.



Aget-Detroit Co. 201 Main at Washington
Phone: 2-5585 Ann Arbor, Michigan

▲ Mention Item NED-9060 when writing ▲

ARCCO-ANUBIS
RECORDING CONTROLLING* LIQUID GRAVITOMETER



CONTROLS BLENDING OF TWO OR MORE FINISHED PRODUCTS

. . . for Pipelines, Refineries, Chemical Plants, etc.

This new instrument serves to determine and record the specific gravity of liquids in the same manner as the standard Arcco-Anubis liquid gravitometer.

*In addition to these features, a controlling mechanism is provided, which may be pre-set to operate the pipe line, refinery, still and plant control valves to any specific gravity range required in blending two or more finished products.

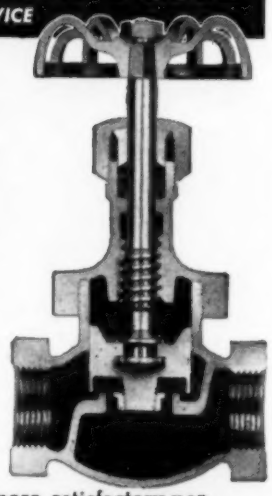
Temperature corrected, this extremely accurate instrument is adaptable to high pressures and is available with internal parts of stainless steel for use with corrosive liquids. Send for bulletin No. 111 A.

AMERICAN RECORDING CHART CO.
3113 E. 11th St. • Los Angeles 23, Calif.

Available for Early Delivery

▲ Mention Item NED-9061 when writing ▲

AN ALL NEW COMPOSITION DISC VALVE
FOR 150 W.S.P.-300 W.O.G. SERVICE



Newly designed from hand wheel to body, this outside bonnet, slip-on composition disc valve contains every latest improvement in renewable disc design.

The deeply indented hand wheel gives a non-slip grip. Complete compression of packing in the deep stuffing box is provided by full threading of packing nut. Heavy outside bonnet permits frequent removal without injury to bonnet or body.

The body and bonnet are precision machined to a hair-line, metal-to-metal contact, making a leak-proof joint. The extra thread engagement gives greatest strength to the body and bonnet joint.

These features add up to longer, more satisfactory performance in heavy duty service. Ohio Brass No. 11 Composition Disc Valves are fully guaranteed for 150 lbs. W. S. P, and 300 lbs. Water, Oil and Gas Pressure.

OHIO BRASS COMPANY, MANSFIELD 1, OHIO

2926-V

Ohio Brass VALVES

▲ Mention Item NED-9062 when writing ▲

ELECTRICAL TESTER

Both bench and portable types are available in this model 30 Multi-Tester which is powered by self-contained 4.5-volt battery. High torque meter is accurate within 3 per cent on direct and 5 per cent on alternating current. Sensitivity is 1000 ohms per volt. This instrument covers 21 ranges including 0-12.5 to 0-1250 volts alternating current, 0-5 to 0-1000 volts direct current, 0-1 to 0-1000 milliamperes direct current, up to 1 megohm resistance, and from −10 to 57 decibels in five ranges. Made by **Bradshaw Instruments Co.**, 348 Livingston St., Brooklyn 17, N. Y.

▲ Mention Item NED-9063 when writing ▲

BALL TYPE CHECK VALVE

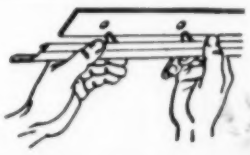
Originally designed for use in petroleum industries, this horizontal Bal-Re-Nu ball type check valve is unaffected by fluid being handled and has numerous industrial uses. Mounting is permanent because unit incorporates removable and replaceable ball and seat. Valve can be furnished in Monel and K Monel in sizes from ½ to 4 inches. All parts are interchangeable. Valve is tested to operate at from 250 to 3000 pounds working pressure. Made by **Jon R. Long Manufacturer**, P.O. Box 414, Ft. Worth, Texas.

▲ Mention Item NED-9064 when writing ▲

FORGING BLANK PREFORMER

Forging blanks can be reduced or preformed by rolling on Reduceroll machine to distribute stock to meet requirements of final forging. Being separate unit, machine can be used in connection with hammers or forging presses, and it preforms uniform blanks free of shuts and folds. It is equipped with air-controlled friction clutch which is tripped for each pass by conveniently located foot pedal. Rolls are overhung to permit easy feeding, accessibility and quick change. Upper roll shaft runs in eccentric bushings which permit adjustment of center-to-center distance of roll shafts. Machine has rigid steel frame with motor enclosed in base. Made by **National Machinery Co.**, Tiffin, O.

▲ Mention Item NED-9065 when writing ▲



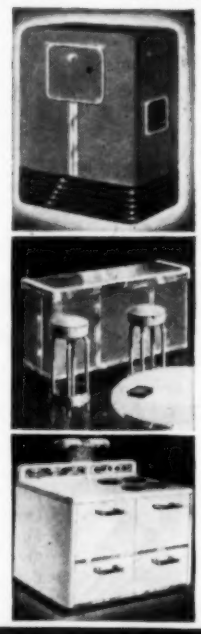
CUYAHOGA *Snap-Clip* ALL IT NEEDS IS A HOLE!

DRESS UP YOUR PRODUCT . .
SPEEDILY . . ECONOMICALLY

IN ADDITION TO EYE APPEAL so vital to sales and profits, Snap Clips provide a low cost, simple, speedy and effective method of applying trim or moulding to your product.

A slight pressure of the hands does the job in a jiffy . . . the Snap Clip alone does the entire job of holding . . . all it needs is a hole.

If you have a fastening or joining problem we'll gladly advise you about the Snap Clip application to your products.



A SUBSIDIARY OF Barium STEEL CORPORATION Straightening the Nation

The CUYAHOGA SPRING Co.
10255 Berea Road • Cleveland 2, Ohio

▲ Mention Item NED-9066 when writing ▲

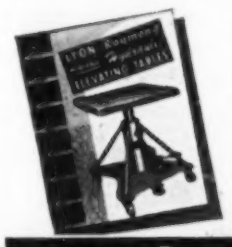
THE ANSWER To Many LIFTING Problems

LYON-Raymond PORTABLE HYDRAULIC ELEVATING TABLE

Worried about costs? Speed? Safety? Damage? — and other factors in handling materials? Then look into these many jobs this handy Lyon-Raymond Elevating Table is designed to do.

HERE-ARE JUST 12 OF ITS USES:

1. Die handling
2. Sheet feeding
3. Adjustable section in conveyor system
4. Work table
5. Assembly bench
6. Positioning work to machine
7. Support for overhanging work
8. Adjustable test bench
9. Transfer table
10. Positioning parts for attachment
11. Welding positioner
12. Loading and unloading



Write for FREE illustrated booklet.

Exhibiting at National Materials Handling Show, Philadelphia, Booths 710 & 711.

LYON-Raymond Corporation
752 Madison St. Greene, N. Y.

▲ Mention Item NED-9067 when writing ▲

PRODUCT OF NATIONAL RESEARCH

NEW! GRADE G-7-830 SILICONE FIBERGLAS LAMINATE

PHENOLITE Laminated PLASTIC
Remarkable HEAT RESISTANT *Material*

Possesses these Exceptional Properties

Tensile Strength	19,000 lbs./sq. in.
Flexual Strength	44,000 lbs./sq. in.
Compressive Strength	40,000 lbs./sq. in.
Water Absorption (1/16 thk.-24 hrs.)	0.15%
Power Factor, 10^6 cycles—Dry	0.0012
Power Factor, 10^6 cycles—(after 24 hrs. water immersion)	0.0088
Dielectric Constant, 10^6 cycles	3.90
Dielectric Loss Factor, 10^6 cycles	.0048
Insulation Resistance	71,600 megohms
Dielectric Strength	486 volts/mil
Arc Resistance (ASTM method)	228 seconds

Silicone Fiberglas Laminate, Grade G-7-830 Phenolite combines high heat, flame and arc resistance. It is recommended for exacting low loss electrical applications and for insulation in transformers, motors and other applications subjected to elevated temperatures.

REG. U. S. PAT. OFF. For full details call or write

NATIONAL VULCANIZED FIBRE CO.
WILMINGTON 99 DELAWARE
Offices in the Principal Cities

▲ Mention Item NED-9068 when writing ▲

When it comes to broaching— THESE NEW COLONIALS

will cut not only costs and time but "headaches" too

here are four reasons—

1. All hydraulic units are grouped externally. Valves are so made you can remove them without disturbing or draining the piping.
2. You won't have any trouble tracing circuits on the enclosed electrical panels.
3. Scientific forced draft cooling of everything inside the machine is one of the reasons for the absence of service difficulties.
4. It's easy to keep the hydraulic system clean. You can remove, inspect and clean the filters without stopping the machine.

THE PULL-DOWNS BULLETIN RD-48

THE PULL-UPS BULLETIN RU-48

THE SINGLE RAMS BULLETIN RS-48

PIONEERS OF H.S.S. BROACHING
COLONIAL BROACH CO. DETROIT 13

▲ Mention Item NED-9069 when writing ▲

CALL Allison

They're CUTTING WHEEL Specialists

More and more, shop men whose job it is to track down cost saving possibilities, now give and take this good advice. It costs nothing to get Allison's recommendations . . . to try Allison wheels. Next time you order,

CALL AN Allison ABRASIVE CUTTING EXPERT

THE ALLISON COMPANY
261 Island Brook Avenue
Bridgeport 8, Connecticut

Allison ABRASIVE CUTTING WHEELS

4AN48

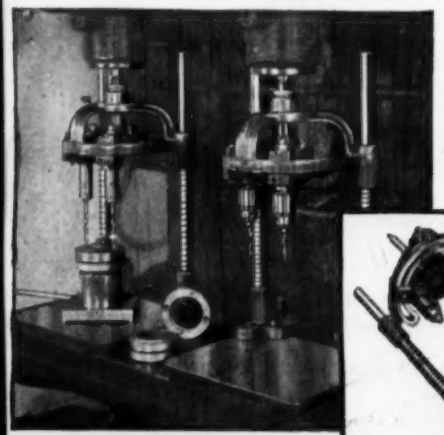
Mention Item NED-9070 when writing

AMERICAN MONORAIL EQUIPMENT
Pays and Saves

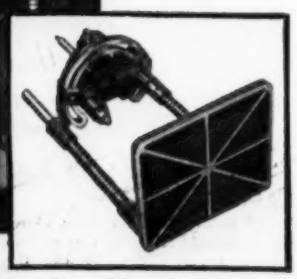
American MonoRail Overhead Handling Equipment increases production, saves labor, saves time, and cuts costs. American MonoRail engineers will gladly show you that automatic handling pays and saves. Send for Bulletin C-1. A fifty-six page book showing successful applications of American MonoRail Systems.

THE AMERICAN MONORAIL COMPANY
13116 Athens Avenue • Cleveland 7, Ohio

Mention Item NED-9071 when writing



Overarm Type has heavy guide pins, ground base 12 by 14 inches.



LINDERME 2-Spindle Head

"increased production from 160 to 600 an hour"

This story is typical of the many applications of Linderme 2-spindle drill heads on long and short runs. You'll like these features: drills, taps —in metal, wood, plastics; quick, accurate adjustment, ½" to 6" centers; two minute set-up on most drill presses in your shop; anti-friction bearings, rugged gearing, quality machining—and Linderme's low initial cost for Overarm or Sleeve Types —Twelve models, capacities up to ⅝", available with G.M. Sleeves or Morse Tapers. Write for complete catalog.

LINDERME MACHINE AND TOOL CO., INC.
12263 COYLE AVE. • DETROIT 27, MICH.

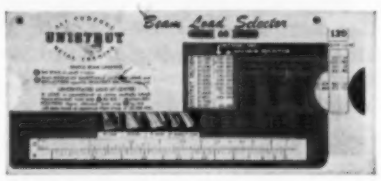
Mention Item NED-9072 when writing

UNIVERSAL TYPE SWITCH

Having single-pole single-throw silver contacts capable of handling 10 amperes at 125 volts alternating or direct current, model DMX switch provides for precision control. High direct current capacity is provided by focussed-flux Alnico magnet which blows out destructive arc as soon as contacts open, ceramic baffle chamber which prevents arc from reaching contact supporting screws, and arc-resistant Melamine base and cover. To permit varied methods of applying operating force, switch is provided with recessed cover which accepts various types of Adaptaplate actuators. Switch is 1 15/16 x 11/16 x 61/64-inch and mounts on 1-inch centers. Made by **Unimax Switch Corp.**, Rm. 1510, 460 W. 34th St., New York 1, N. Y.

Mention Item NED-9073 when writing

METAL FRAMING CALCULATOR

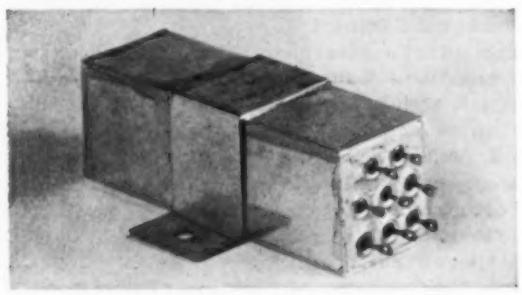


Permissible loads in beam and column members of Unistrut metal framing can be calculated readily with this slide rule type Load Selector. It enables user to estimate quickly and accurately the amount of weight which can be supported by various Unistrut sections under varying conditions of span and unbraced height. Conversely, selector determines number of sections required to support given load. Available free from **Unistrut Products Co.**, 1013 W. Washington Blvd., Chicago 7, Ill.

Mention Item NED-9074 when writing

HERMETICALLY SEALED RELAY

Four-pole, double-throw, hermetically sealed Millisec relays will operate as fast as 1/3-millisecond and have contact rating of ½-ampere on 110-volt direct current.



They have life expectancy of from 22 to 100 million operations. Because they are light in weight and compact, they are particularly suited for high speed keying in aircraft or on shipboard. They are recommended for application also in high speed computers, business machines, commutators and other applications where ultra high speed is required. Made by **Stevens-Arnold Inc.**, 22 Elkins St., South Boston 27, Mass.

Mention Item NED-9075 when writing

Stationary Outer Sheath Guarantees Safety

- Improved—25% More Power
- Full Electric Reverse for Rapid Withdrawal
- Increased Speed Through Greater R.P.M.
- Lighter due to New Aluminum Frame
- Rotating Inner Cables
- Lines 1¼" to 8"
- Runs up to 200 ft.
- Over 4,000 in use
- 8 years in production
- Each tool Engineered for particular purpose

OHIO TOOL & ENGINEERING CO.
SPRINGFIELD, OHIO

Mention Item NED-9076 when writing

At Accurate
the ability to make GOOD SPRINGS . . .
the ability to ANALYZE your spring problems . . .
lowers the ultimate cost of your springs

Long experience has given Accurate the ability to make good springs —to meet your specifications precisely. And, if necessary, Accurate engineers will analyze your spring problems and design the right springs to assure top performance for your product. This is all a part of Accurate Spring Service. Be sure and find out more about it, today.

SPRINGS
WIREFORMS
STAMPINGS

Accurate Springs

ACCURATE SPRING MANUFACTURING CO.
3805 W. Lake Street Chicago 24, Illinois

Mention Item NED-9077 when writing

Designed ESPECIALLY FOR TODAY'S NEEDS

USE EX-CELL-O TOOL GRINDERS FOR ECONOMICAL TOOL RECONDITIONING

Ex-Cell-O tool grinders cover a wide range of work—from the needs of small shops that require economical equipment to condition cutting tools only occasionally, to the needs of those larger plants that regularly grind tools in large quantities. Ex-Cell-O grinders enable manufacturers to reach the highest efficiency in tool grinding, cut down grinding time, improve finish, speed up production, and prolong tool life. Send today for Catalog 46262 showing complete line of Ex-Cell-O's standard tool grinders.

XLO

46—45

EX-CELL-O CORPORATION
DETROIT 32, MICHIGAN

Mention Item NED-9078 when writing

1. NOPAK Dual 4-Way Valve controls all three Cylinders. 2. NOPAK Model E Cylinder (1½"x6") operates hold-down mechanism. 3 and 4. NOPAK Model E Cylinders (4½"x12") supply cutting power.

NOW it's a POWER Shear

—thanks to 3 NOPAK Air Cylinders and one NOPAK Dual 4-Way Valve

Slow, laborious, manual operation of this sheet-metal shear is a thing of the past. After sheet is in position, workman moves control rod, which operates Dual 4-Way Valve (1) to first position to actuate Model E air cylinder (2) which operates hold-down mechanism. When lever is moved to second position, two large Model E cylinders (3&4) mounted at each end of the treadle supply the cutting power. Returning control lever to first position reverses all cylinders, opens shear for another cut.

Cutting cycle is now many times faster, strain and fatigue are eliminated, workmanship improved. Expect similar results on your machines through the use of NOPAK Valves and Cylinders.

GALLAND-HENNING MFG. CO., 2755 S. 31st St., Milwaukee 7, Wis.

Representatives in Principal Cities

NOPAK VALVES AND CYLINDERS
DESIGNED for AIR and HYDRAULIC SERVICE

Mention Item NED-9079 when writing

MAINTENANCE TIME COSTS MONEY

Why do things the hard way? SAVE hours of labor in machine and maintenance shops by using Tasgon — the quickest, most penetrating rust solvent on the market. Tasgon works its way into the tightest joints . . . a few drops quickly free nuts, bolts, couplings, or connections of any sort frozen with rust. Tasgon also dissolves gummed-up oil, tar, paint . . . cleans and lubricates contact surfaces.

Write today for FREE sample and complete information.

Samuel Cabot, Inc.
2156 Oliver Building,
Boston 9, Mass.

TASGON

▲ Mention Item **NED-9080** when writing ▲

SUNNEN HONING
Saves Time . . .

Steps Up Production of Shift Forks . . .
at Spicer Mfg. Div. of Dana Corp., Toledo, Ohio

Induction hardening of areas on these parts creates high spots and distortion which must be removed.

Surfaces are too hard to ream or to broach, but Spicer engineers found the answer when they turned to Sunnen Honing. Sunnen honing stones removed the metal quickly and at much lower cost than by any other method. Sunnen Honing produced straight, round holes—with fast rate of stock removal.

Here are other reasons why hundreds of industrial plants are using Sunnen Precision Honing Machines —

- **Wide Range—hones diameters from .120" to 2.625". Open or blind holes and bores with keyways**
- **Hones All Metals, Ceramics, Glass—steel, cast iron, bronze, brass, aluminum**
- **Accuracy Within .0001" Guaranteed — corrects out-of-roundness and distortion. Produces straight, round holes**
- **Produces Any Micro-inch Finish Required — no high spots or chatter marks.**

Write for bulletin XSP-5 or, on request, a Sunnen engineer will be glad to show you the advantages of using Sunnen Honing in your plant.

381

SUNNEN PRODUCTS COMPANY
7966 Manchester Ave., St. Louis 17, Mo.
Canadian Factory: Chatham, Ontario

SUNNEN HONING
"Low-cost production of precision holes"

▲ Mention Item **NED-9081** when writing ▲

INDUSTRIAL BATTERY CHARGER

Furnished as compact packaged unit, Charge-O-Matic single-circuit motor-generator charger will charge lead-acid motive power batteries in 8 hours and nickel-alkaline batteries in 7 hours. Electrical connections, relays and working parts are mounted on panel inside cabinet which has "dead front" construction for safety. Angle-set control panel provides for easy reading and operation. Made by **Hertner Electric Co.,** 12712 Elmwood Ave., Cleveland 11, O.

▲ Mention Item **NED-9082** when writing ▲

INSULATION HOLDING CLIP

Designed to attach insulation to sheet metal, this Lexsuco insulation clip has pointed shank which will penetrate any metal thickness up to 18-gage. Two shoulders prevent penetration beyond thickness of insulation; and lock, stamped into shank, holds clip positively in place. Units are available in standard sizes and do not require special tools for installation. Clips are practical on both exterior and interior work. In application of insulation to steel roof deck, only four clips are required to hold 2 x 4-foot sheet firmly in place. Made by **Lexington Supply Co.,** 134 Lexington Ave., Cleveland, O.

▲ Mention Item **NED-9083** when writing ▲

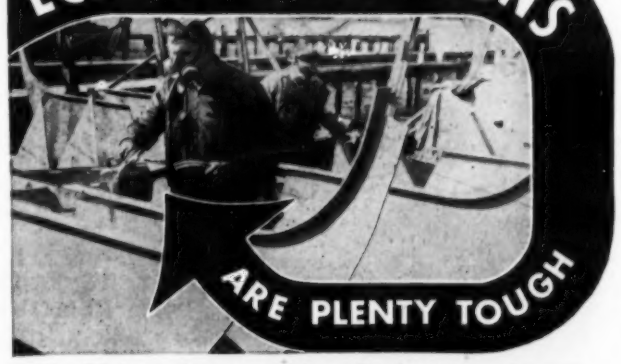
PORTABLE ABRASIVE TOOL

Operating on 360-cycle 220-volt 3-phase current, portable abrasive tools have exceptional power per unit of weight. Line includes small wheel grinders; cone sanders;

4, 6 and 8-inch straight grinders; 6-inch cup grinders; 7 and 9-inch sanders and 9-inch polishers. For light work, motor speed of 21,600 revolutions per minute is used direct, and for heavy operation, it is geared down to correct spindle speed. Motor is squirrel cage induction type. Under severe load, speed holds to within 5 per cent of free speed. Ample cooling is provided by solid web fan. Precision bearings are mounted in steel inserts cast into magnesium housings, and solid rotors are dynamically balanced. Made by **Rotor Tool Co.,** 17320 Euclid Ave., Cleveland 12, O.

▲ Mention Item **NED-9084** when writing ▲

ECLIPSE SPRAY GUNS



Simplified one-piece construction—all vulnerable moving parts protected—easily serviced and plenty tough.

The most important part of any spray gun is "the nozzle." Eclipse nozzles are not made of brass but of hardened steel, especially designed to take plenty of punishment and continue to give continuous top performance.

Do you want to reduce paint waste—paint faster and better—get a smoother finish, a brighter gloss?

Use Eclipse Spray Guns and Low Pressure Spray Equipment

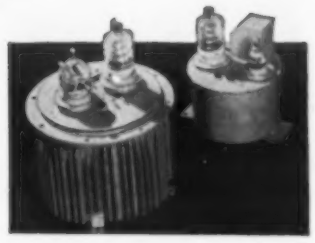
Send for our complete catalogue

Write: ECLIPSE AIR BRUSH COMPANY
Park Avenue at 14th Street • Newark 7, N. J.

Spray Equipment Division
ECLIPSE
Manufacturers of Low Pressure Spray Equipment Since 1908

▲ Mention Item **NED-9085** when writing ▲

Electronic Components



Oil-filled

Hermetically sealed

Service-proved

General Electric's line of resonant reactors, pulse transformers and filament transformers — all of them oil-filled and hermetically sealed—now lists a wider range of ratings than ever before. These components incorporate the extensive experience G.E. has gained in meeting the stringent demands of the Armed Forces.

Besides their place in broadcast, television, and radar equipments, G-E electronic components are suitable for nuclear physics research and numerous special applications in and out of the communications field. Can be built to meet current Army, Navy, and Air Force specifications. Inquiries invited. Give your requirements to the nearest G-E office, or write directly to *General Electric Company, Transformer Sales Division, 16-215, Pittsfield, Mass.*

GENERAL ELECTRIC
401-86

▲ Mention Item **NED-9086** when writing ▲

A New Electric AIR CONTROL VALVE

. . . for Faster Operation of
- **PNEUMATIC CYLINDERS**
- **PRESSES**

PUSH BUTTON CONTROL. The modern way to operate air cylinders and other air powered equipment. Provides for 3-way or 4-way air flow.

FAST CYCLING. Capable of 180, or more, cycles per minute. Ideal for working out automatic controls with limit switches, etc.

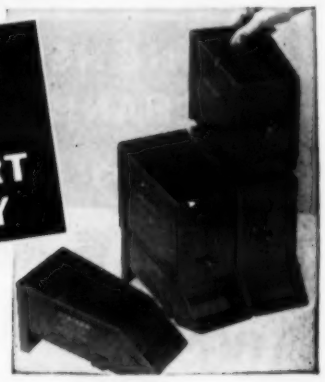
POSITIVE, POWERFUL. "Packless" construction; corrosion proof. Slide type, pilot operated, solenoid controlled.

SIZES. 3/8", 1/2", 3/4", and larger. Send for descriptive literature and engineering recommendations. HANNIFIN CORPORATION, 1101 South Kilbourn Avenue, Chicago 24, Illinois.

HANNIFIN

▲ Mention Item **NED-9087** when writing ▲

SPEED for SMALL PART ASSEMBLY



Floors slope to feed parts to front—end reaching and fumbling.

Bins taper toward front to form convenient semicircle —keep all bins within easy reach.

Stacking, locking construction for rigid set-ups, easily changed when necessary.

All-welded construction. Smooth, folded edges.

New-design, adjustable hoppers provide increased capacity and permit regulated flow of parts according to sizes and weights.

Two sizes—tapered or straight sides.

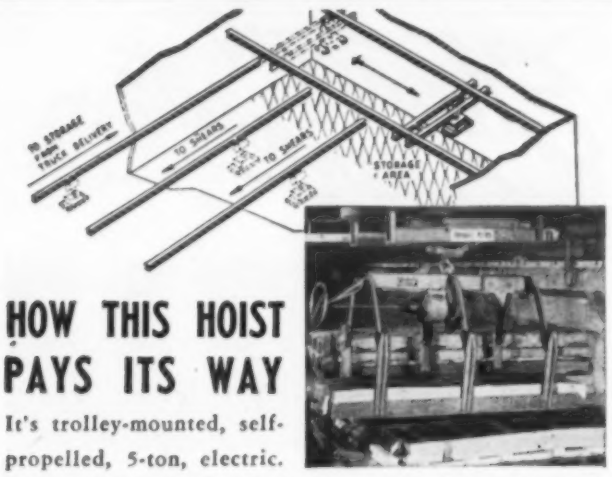
IMMEDIATE DELIVERY

Manufactured and sold in Canada exclusively by Wickware-Stackbin, Ltd., Ottawa

Write Stackbin Corporation, 1089 Main Street, Pawtucket, R. I.

STACKBIN SYSTEM
"Stacked and Still Accessible"

▲ Mention Item **NED-9088** when writing ▲



HOW THIS HOIST PAYS ITS WAY

It's trolley-mounted, self-propelled, 5-ton, electric. Moves sheet steel *fast*. Used with traveling bridge it unloads delivery trucks, carries standard 5-ton bundles (an economical packing) to storage, moves sheets to shears. One operator handles this efficient, money-saving system. There's an R & M Hoist for every lifting purpose. So, "Take it UP with R & M."

Write for details, explaining briefly your lifting problem.

ROBBINS & MYERS · INC.
· HOIST & CRANE DIVISION ·
SPRINGFIELD 96, OHIO · BRANTFORD ONTARIO
MOTORS · FANS · MOYNO PUMPS · FOUNDED 1878

▲ Mention Item NED-9102 when writing ▲

When You Think of Gears . .

THINK OF—
"Industrial"
CUT GEARS
SPROCKETS • RACKS

BEAR IN MIND—our facilities are complete for the manufacture of gears for a wide range of applications. We're fully tooled for cutting Spur, Bevel, Mitre, Worm, Internal, Spiral, Angular and Helical Gears, including Splines, Machine Racks, Roller and Silent Chain Sprockets.

Large plant capacity—last word in machinery and skilled craftsmen enables us to render gear service that satisfies.

Make it a habit to send us your orders.

INDUSTRIAL GEAR MFG. CO.
4541 VAN BUREN STREET CHICAGO 24, ILLINOIS

▲ Mention Item NED-9103 when writing ▲

For HIGHEST ELECTRICAL & MECHANICAL Efficiency!

New
JONES 2400 SERIES PLUGS & SOCKETS

Improved Socket Contacts. Four individual flexing surfaces. Positive contact over practically their entire length.

Both Plug and Socket Contacts mounted in recessed pockets greatly increasing leakage distance, INCREASING VOLTAGE RATING. Plug and Socket Contacts cadmium plated. Add to appearance of your equipment. Interchangeable with Jones 400 Series.

Ask for Catalog 16. Complete line Jones Plugs, Sockets, Terminal Strips.

P-2406-CCT
Plug — with cable clamp in top.

S-2406-SB
Socket with shallow bracket for flush mounting.

HOWARD B. JONES DIVISION
Cinch Mfg. Corp.
2460 W. GEORGE ST. CHICAGO 18, ILL.

▲ Mention Item NED-9104 when writing ▲

ROLLER CHAIN FASTENER

Fastener for roller chain used on plant machinery, on construction equipment and in mine and oil fields withstands severe usage and provides maximum safety for workmen. It is retaining ring having no dangerous points exposed and is sprung radially into groove on pin. Equal spacing of three internal teeth and spring action of connecting links assure that ring will maintain tight groove tension at all times. As shown in illustration, disassembly can be accomplished readily with ordinary screwdriver. Made by **Atlas Chain & Mfg. Co.**, 3805-11 Castor Ave., Philadelphia 24, Pa.

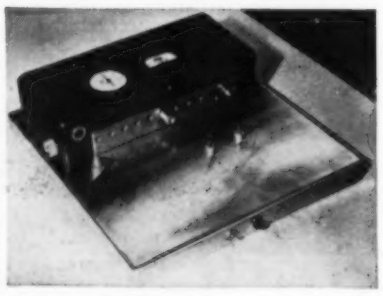
▲ Mention Item NED-9105 when writing ▲

ROLL HANDLING TRUCK

Originally developed to handle double rolls of wallpaper, this heavy duty truck is well suited to carrying roll roofing, building paper, wrapping paper, tile pipe, paper tubes, textiles and all products with comparatively small diameters and lengths up to 5 feet. Regardless of number of pieces stacked, 6-foot diameter body keeps load centered. Products can not roll off. Truck is fabricated from steel pipe and is equipped with 8-inch diameter semi-steel or rubber-tired wheels. Made by **Ironbound Box & Lumber Co.**, 47 Hoffman Place, Hillside, N. J.

▲ Mention Item NED-9106 when writing ▲

FATIGUE TESTING MACHINE



Rotating - beam type wire fatigue testing machine provides information helpful in controlling wire drawing processes, wire acceptance on basis of fatigue data, predicting wire life in service and determination of safety factors in design. Machine operation involves looping of sample of predetermined length through 180 degrees so that bending stress can be predicted, calculated and brought to as great a value as desired to hasten specimen failure. Machine will accommodate wire specimens from 0.0005 to 0.030-inch in diameter. Chuck power is supplied by 3600-revolution per minute motor. Bushings position end of sample which is not clamped, and supporting guides hold specimen in horizontal plane. Made by **Hunter Spring Co.**, Dept. NED, Lansdale, Pa.

▲ Mention Item NED-9107 when writing ▲

R-B INTERCHANGEABLE PUNCHES and DIES

Click! AND THEY'RE INSTALLED

. . . and JUST AS EASY TO REMOVE

Quickly and easily installed and removed, *R-B interchangeable punches and dies* reduce to a minimum press "down-time" for punch or die replacement. They save time and money in die building, too, because they are easily and accurately assembled in die construction. They are completely interchangeable; controlled hardness and very close tolerances insure uniformity. Immediate delivery on standard sizes and shapes. Those of special sizes, shapes and materials are made promptly to your specifications.

Get the whole story in this free catalog.

ALLIED PRODUCTS CORPORATION
Department 26 • 4610 Lawton Ave. • Detroit 8, Michigan

▲ Mention Item NED-9108 when writing ▲

HYPRESSURE JENNY STEAM CLEANER

✓Shortens Repair Time . . .
✓Saves Man Hours . . .
✓Lessens Fire Hazards

Cleans
Machinery
Tools
Walls
Windows
Etc., Etc., Etc.

8 to 10 Times Faster than by hand methods

Hypressure Jenny Steam Cleaning is the *fastest* most *thorough* method known for removing oil, dirt and grease from any surface. Cleaning is accomplished by a highly atomized mixture of steam, hot water and cleaning compound applied under pressure through a spray gun. One man using Hypressure Jenny can do more cleaning in one hour than 10 men can accomplish in the same time by hand methods. ● Your inquiry will bring full particulars without obligation. Write us today.

HYPRESSURE JENNY DIVISION
HOMESTEAD VALVE MANUFACTURING CO.
P. O. BOX 84 CORAOPOLIS, PA.

▲ Mention Item NED-9109 when writing ▲

Costs Go Low . . . as materials flow on the Crescent Electric PALLETIER

What It Can Do For You . . .

- Save labor — one man replaces a crew
- Speed production — increase worker safety
- Step up loading and unloading of freight cars
- Stack loads high — utilize more storage space
- Turn in narrow radius

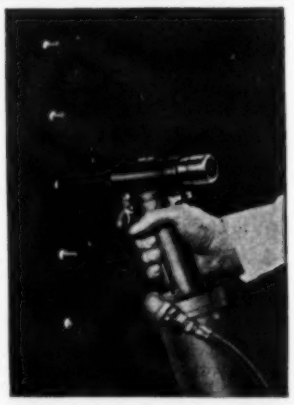
Send For Free Bulletins

Illustrated bulletins show how Crescent PALLETIER fits into your materials handling operations. Capacities range from 1,000 to 6,000 lbs.

Crescent
TRUCK COMPANY, 1050 WILLOW ST., LEBANON, PA.
INDUSTRIAL TRUCK AND TRACTOR SPECIALISTS SINCE 1917

▲ Mention Item NED-9110 when writing ▲

CHERRY BLIND RIVETS



make hard jobs easy

SAVE TIME Cherry Rivets save production time and give you a quick, simple fastening method for a wide range of materials. They combine the strength of solid rivets with a fastening technique as simple as driving nails.

EASY TO USE In sheet metal work they stand alone . . . unequaled. Easy to install. Easy to remove. Easy to replace. They enhance the appearance of any job. Try Cherry Rivets and gain years of less expensive assembly work.

Cherry Rivets are made from aluminum, steel, or Monel. Standard rivets are available in five diameters and two head styles. There is a wide range of grip lengths. Special heads, diameter, grip lengths, and alloys will be made to order.

CHERRY RIVETS. THEIR MANUFACTURE & APPLICATION ARE COVERED BY U.S. PATENTS ISSUED & PENDING

Cherry Rivet Company
LOS ANGELES 13, CALIFORNIA

Write us today for further information. Address Dept. L-113 Cherry Rivet Company, 231 Winston Street, Los Angeles 13, Calif.

Cherry Rivets are approved by Civil Aeronautical Authority & Underwriters' Laboratories, Inc.

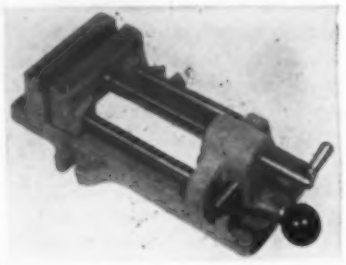
▲ Mention Item NED-9111 when writing ▲

NO BUR TOOLS

NOBUR MANUFACTURING CO.
717 N. Victory Blvd., Burbank, Calif.

▲ Mention Item **NED-9112** when writing ▲

QUICK-ACTING VISE



Holding of production workpieces for machining or other operations is simple matter with this Jawset vise. Movable jaw is set to preselected position and for any holding pressure up to 2 tons by means of adjusting screw. Once setup is completed, work can be inserted, locked in vise or released merely by flipping ball crank handle. Built-in parallels or recessed jaws position work accurately, or special jaws can be employed to hold jigs, fixtures or workpieces. Model No. 410 with 4-inch jaws opens to maximum of 5⅛ inches while model No. 610 with 6-inch jaws has 7-inch maximum opening. Made by **Hartmann Mfg. Co.,** 1600-A Junction Ave., Racine, Wis.

▲ Mention Item **NED-9114** when writing ▲

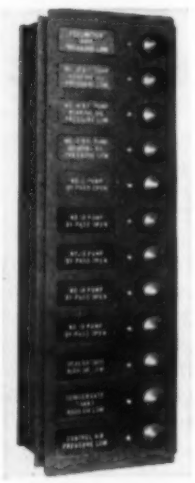
HARD-FACING ELECTRODES

Two hard-facing electrodes are available as bare rod for application by oxyacetylene process or coated for metallic-arc welding. Haynes 90 rod is highly resistant to impact, abrasion and heat. It also has excellent resistance to oxidation at temperatures up to 1000° F. Haynes 92 rod is moderately low melting point hard-facing material that is resistant to severe abrasion. This alloy is particularly suitable for applications where low temperature deposition is necessary to prevent distortion of base metal.

No. 90 rod is suited for hard-facing wearing parts on machinery and equipment used for crushing and handling hard, friable materials such as sand, slag, coke, limestone and coal. No. 92 rod is suitable for hard-facing massive parts where little or no preheating is practicable. Made by **Haynes Stellite Co.,** Kokomo, Ind.

▲ Mention Item **NED-9115** when writing ▲

AUDIO-VISUAL ANNUNCIATOR



Single-style ANF type Annunciator features same operating characteristics as former double style (*See NED March* '48) yet is one-half the width so as to facilitate installation in new or existing panel boards and control racks. Each signalling unit, one for each designation window, consists of main lamp to provide illumination of translucent window, enclosed pilot light and control relay. It is jack-connected to circuit and mounted on metal slide to permit rapid removal for service replacement. Closing of trouble 'contact' on equipment under supervision illuminates designation on face of cabinet and sounds remote audible alarm. Silencing of alarm for one trouble indication does not prevent operation of same audible alarm in event of additional trouble. Units can be furnished for operation on either alternating or direct current. Made by **Autocall Co.,** 4761 Tucker Ave., Shelby, O.

▲ Mention Item **NED-9116** when writing ▲

HANDY WASH FACILITIES

PLUS Sanitation and Economy

Bradley installation in prominent packing house showing one of the 36" circular Washfountains with foot-control.

Bradley Washfountains offer maximum in sanitary washing facilities and employee convenience. Both the 36" (serving up to six persons simultaneously) or 54" size (serving eight to ten) reduce the amount of piping and piping connections. They save from 70 to 80% in water consumption and reduce maintenance costs since one Washfountain replaces many "single-person" wash basins. Furthermore, Bradleys are almost self-cleaning since water is drained off as used with no collection of contaminating dirt. BRADLEY WASHFOUNTAIN CO., 2253 W. Michigan Street, Milwaukee 1, Wisconsin.

BRADLEY washfountains

Big illustrated catalog 4701 available on request.

▲ Mention Item **NED-9118** when writing ▲

EVERYTHING you want for engineering drawing reproduction...

THE BIG NEW PLUS

Kodagraph Autopositive Paper

Provides unexcelled intermediates for quantity printing. Remarkable new photographic emulsion increases contrast in reproduction . . . gives dense black on pure white, durable, extra-thin base. Assures reproduction prints of exceptional legibility.

"Restores" old prints. Reproduces worn, faded, "unprintable" tracings. Prints from opaques and blueprints directly.

Reproduces in direct process, blueprint machines. Prints directly to positive. No negative step. Handles in ordinary roomlight. Normal photographic processing.

Stays flat. No curl. No wrinkle. No buckle. Easy to handle in processing, mailing, filing. Takes pen or pencil corrections readily.

Your local blueprint service will be glad to produce Kodagraph Autopositive intermediates and, if you wish, direct process prints or blueprints from them. Or your own reproduction department can make prints on Kodagraph Autopositive Paper.

For more information on this revolutionary new paper . . . information on the rest of the Kodagraph line . . . mail coupon at right.

EASTMAN KODAK COMPANY
Industrial Photographic Division
Rochester 4, N. Y.

Kodak

▲ Mention Item **NED-9113** when writing ▲

JIFFY ALL METAL CABINET

32 DRAWER UNIT ONLY $8.95
POSTAGE PAID
64 DRAWER UNIT $15.95

FOR SMALL PARTS STORAGE OR ASSEMBLY BENCH WORK

with RUST-PROOF ALUMINUM DRAWERS

APPROXIMATE SIZES
DRAWER
1¼" Deep
2¾" Wide
6" Long
32 DRAWER UNIT
6" Deep
12¾" Wide
15¼" High
64 DRAWER UNIT
6" Deep
25½" Wide
15¼" High

Spot welded steel cabinet, metal flange drawer guides, enamel finish and solid one-piece aluminum drawers in natural satin finish. The first multiple drawer (32 or 64 drawer units) metal cabinet for small parts storage or assembly bench work at such a low cost. Order now for immediate delivery. Send check or money order or rated companies shipped on receipt of purchase order.

KAYTEE PRODUCTS
DEPT. P. • BOX 588 • CANTON, OHIO

▲ Mention Item **NED-9117** when writing ▲

Kodak

EVERYTHING you want for office photocopying...

THE BIG NEW PLUS

Kodagraph Contact Paper

Brilliant reproduction. Gives rich, high contrast black-and-white negatives and positives on present equipment.

Handles easily. Has wide latitude . . . amazing uniformity. Gives operators wide safety margins. Same exposure, same development, sheet to sheet, package after package. Requires fewer trial exposures and remakes.

Resists curl. Prints stay smooth and flat. Tough, high quality Kodak-made paper assures long service in shop and office.

No new equipment needed. Nothing new to buy—except the paper . . . nothing new to learn. For full information about the new Kodagraph line—including details on Kodagraph Projection Papers—use coupon below.

EASTMAN KODAK COMPANY
Industrial Photographic Division, Rochester 4, N. Y.

MAIL COUPON FOR FREE KODAGRAPH BOOKLET

EASTMAN KODAK COMPANY
Industrial Photographic Division
Rochester 4, N. Y.

Please send me a free copy of "The Big New Plus," telling the whole story on Kodagraph Reproduction Papers. I have direct process ☐ blueprint ☐ contact printer ☐ equipment.

Name_____ (please print)
Department_____
Company_____
Street_____
City_____ State_____

83

▲ Mention Item **NED-9119** when writing ▲

NEW

PORTABLE POWER MACHINE for Pipe and Bolt Threading

The Oster No. 582 "TOM THUMB" has 18 distinctive features that combine to make it the most advanced machine of its type and capacity range. Among these features are:

New "SPINFAST" Front Chuck. No chuck wrench needed. A quick spin of the wheel chucks or unchucks the pipe instantly.

The new Cut-Off Device is the quick-cutting roller type. New Reaming Device (integral with die-head) is mounted on front for close work. Operation is extremely fast.

Those and 15 additional features make this a real cost-saving threader for industrial users, contractors, and others.

Standard range is ¼" to 2" pipe; extra range ⅛" pipe; range with special drive shaft 2½" to 8" pipe. Bolt range ¼" to 1½".

Write for Illustrated Catalog No. 30

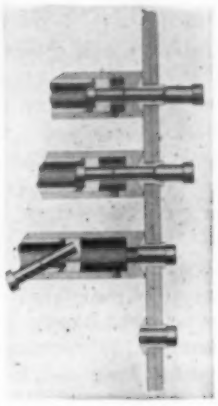
THE OSTER MFG. CO.
2066 East 61st Street
Cleveland 3, Ohio, U. S. A.

OSTER

for faster, better threading

▲ Mention Item NED-9120 when writing ▲

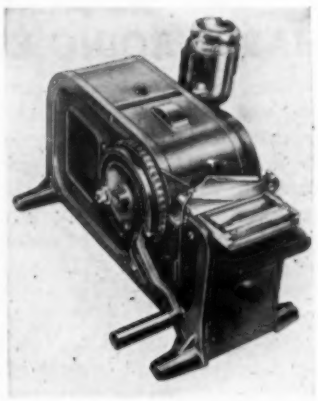
BLIND TYPE RIVET



Since stem fractures flush with head, series CR158 and CR159 blind rivets act as self-plugging units for fast installation. They are of A17ST aluminum alloy and have about same strength as solid rivets of that material except when used in thin sheets. For higher shear strength, rivets can be supplied in 24ST aluminum alloy. Stems in either case are 17ST. Rivet expands in place when stem is pulled by hand or power 'gun' as shown. Added force fractures stem. Made by **Cherry Rivet Co.**, 211 Winston St., Los Angeles 13, Calif.

▲ Mention Item NED-9123 when writing ▲

TAPE DISPENSER



Pressure plate of Counterboy 500 series tape dispensers has range of five settings to provide flexibility in gummed tape moistening. Operator can adjust moistening pressure quickly to requirements of specific tape weight or glue formula. Water level can also be adjusted by turning set screw on water fountain bracket. Unbreakable plastic water fountain bottle is fitted with rubber slip-on cap and holds 16 ounces.

Series consists of eight models including single and two-length repeaters, two and three-roll machines, slitters, special measuring units and immersion moistening machines. Illustrated general shipping room model 500-A measures, moistens and dispenses tape strips from 4 to 50 inches on upstroke of handle. Made by **Better Packages, Inc.**, Dept. NED, 255 Canal St., Shelton, Conn.

▲ Mention Item NED-9124 when writing ▲

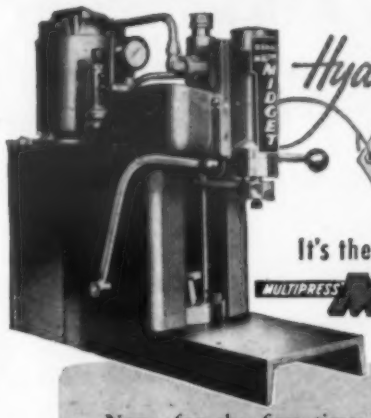
FLEXIBLE COUPLINGS

Seventeen sizes of multiple horsepower flexible couplings are now available covering range from 1/50 to 100 horsepower at 1750 revolutions per minute. Sizes from 1/50 to 15 horsepower have 15-degree torsional deflection under rated load, and larger sizes have 3 degrees. They will accommodate at least 2-degree angular and 1/32-inch parallel misalignment. Bonded to steel plates, Neoprene flexing elements operate in shear. Since there are no bearing surfaces to chafe, couplings are quiet, require no lubrication and are unaffected by such abrasives as emery, sand, crushed rock and metal particles. Made by **Lord Mfg. Co.**, Erie, Pa.

▲ Mention Item NED-9125 when writing ▲

Denison Announces a Complete . . .

OIL *Hydraulic Press*



FOR ONLY **$325.00** LESS MOTOR & STARTER

It's the NEW PACKAGED UNIT

MULTIPRESS* **MIDGET**

* REG. U. S. PAT. OFF.

Now, for the first time, you can get a real MULTIPRESS, at a price comparable to other less versatile low tonnage equipment. Never before have the production-boosting features of the MULTIPRESS been available in a 2000 lb. capacity press, *and at this low price.*

You'll get features in the new Midget which you can't get in any other press. The oil-smooth hydraulic action exerts the same exact, preset pressure—regardless of part size variation. There is no dependence on operator skill or "feel," and unskilled operators turn out high, reject-free production.

If you're looking for all-around adaptability—you'll want the MULTIPRESS Midget. Write for details and ask for Bulletin M-15A.

DENISON Hydroilics

The DENISON Engineering Company
1151 Dublin Road • Columbus 16, Ohio

▲ Mention Item NED-9127 when writing ▲

ANOTHER SPECIAL BY PROGRESSIVE

QUALITY PROMCO BRAND

CATALOG SHOWS DOZENS MORE

Special heads, threads and finishes on any metal or alloy adapted to cold upset. Weekly output: 25,000,000 pieces. Many specials, suggesting production savings for you, illustrated in latest catalog. Includes weights per 1M standard pieces, dec. equivs. of fractions, other purchasing and engineering helps. Write for Catalog 19.

The PROGRESSIVE MFG. CO.
46 NORWOOD ST. • TORRINGTON, CONN.

▲ Mention Item NED-9121 when writing ▲

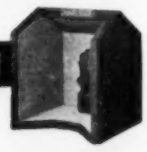
HEAR-HERE!

It's quiet inside —even with the noisiest surroundings

The Burgess Acousti-Booth provides easy telephoning anywhere . . . in any surroundings . . . because its scientific *acoustic* construction blots up noise. The "zone of quiet" inside allows conversations or shop orders to be clearly understood, and reduces costly errors due to misunderstanding.

The Acousti-Booth has no doors, so it's easy to clean . . . always well ventilated . . . never stuffy. Constructed of heavy-gauge sheet steel. Other models of handsome walnut-stained plywood to harmonize with office interiors. Write for illustrated Acousti-Booth booklet.

Mail Coupon for Free Bulletin!



Burgess-Manning Company
743-C East Park Avenue, Libertyville, Illinois

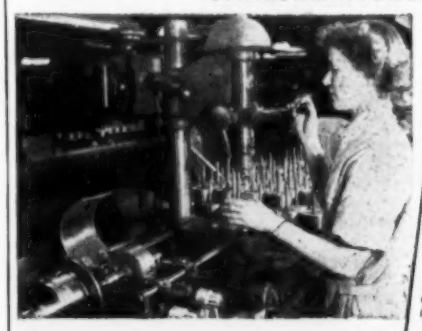
Please send illustrated booklet describing the Burgess Acousti-Booth.

NAME _____
FIRM NAME _____
STREET-CITY _____

"Scout" model Acousti-Booth is ideal for congested locations busy factories.

▲ Mention Item NED-9122 when writing ▲

CASE REPORT No. 51 from a series of actual cases recording the successful application of BEAR DY-NAMIC BALANCING to Industry.



Pezzillo Pump Co. Philadelphia, Pa. —reports greater quietness, smoothness of operation and better performance since balancing their rotors on Bear Machines. Approximately a minute and a half required for each rotor. They say Bear Balancing Machines are easy-to-operate, trouble-free, fast in production!

250 to 300 ROTORS per day

DY-NAMICALLY BALANCED

—on Bear Balancing Machines at Pezzillo Pump Company.

Benefits of Dy-Namic Balancing which they report, can be yours, too, when you use Bear Machines to balance rotating parts. Select the machine that fits your need, from the new Bear Dy-Namic Balancing Manual.

FREE MANUAL Tells How to Balance All Rotating Parts

This new Dy-Namic Balancing Manual tells you how you can easily, quickly, economically balance rotors, armatures, crankshafts, and other rotating parts, weighing from 4 oz. to 8 tons. Also tells how Bear Dy-Namic Balancing Reduces Wear on Rotating Parts, Eliminates Noise and Vibration, Improves Efficiency of Finished Product. SEND FOR YOUR COPY, TODAY. Address Bear Mfg. Co., Dept. N-5, Rock Island, Ill.

BEAR STATIC AND DY-NAMIC BALANCING MACHINES

2948

▲ Mention Item NED-9126 when writing ▲

Save Money on Motor Maintenance

Look for this Sign

Do your motors operate under conditions of overload, heat, moisture? Are oil, dust, acids or corrosive vapors and fumes hazards to motor operation in your plant?

Then Fiberglas*-base Electrical Insulating Materials can save you time—and money. You'll have fewer motor failures, less down time, less rewind expense—because Fiberglas-base materials have far higher resistance to these hazards than ordinary organic insulations.

There are experts in your community, skilled in the use of these highly efficient electrical insulating materials. This sign—the sign of quality service—identifies the Approved Fiberglas Repair and Rewind Shops. Thousands of users, all over the country, are finding that it pays to patronize these shops. Write for the names of approved shops in your community. Owens-Corning Fiberglas Corporation, Dept. 921, Toledo 1, Ohio. Branches in principal cities.

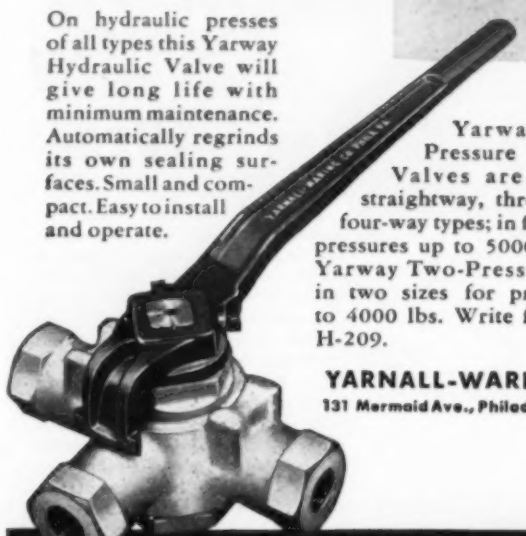
OWENS-CORNING **FIBERGLAS** ELECTRICAL INSULATING MATERIALS

*FIBERGLAS is the trade-mark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

▲ Mention Item NED-9128 when writing ▲

The Higher the Pressure ...the Tighter the Valve

On hydraulic presses of all types this Yarway Hydraulic Valve will give long life with minimum maintenance. Automatically regrinds its own sealing surfaces. Small and compact. Easy to install and operate.



Yarway Single-Pressure Hydraulic Valves are made in straightway, three-way and four-way types; in five sizes for pressures up to 5000 lbs. Also Yarway Two-Pressure Valves in two sizes for pressures up to 4000 lbs. Write for Bulletin H-209.

YARNALL-WARING CO.
131 Mermaid Ave., Philadelphia 18, Pa.

YARWAY
Improved Type
HYDRAULIC VALVE

Mention Item NED-9129 when writing

Air Operated ROTARY WORK FEEDER

Deftly holds and delivers small parts to drill, tap, swage, stake, etc. Stations accurate to .002". Guaranteed against over-travel or "skipping". Indexes as slow or fast as you like, up to 10,000 per hour. Compact and sturdy, easy to tool and hook up.

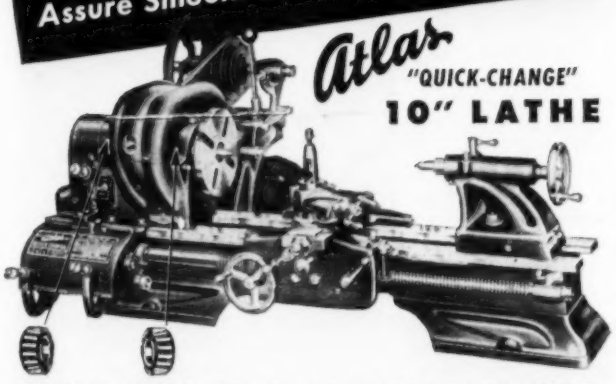
Standard dial plate 10"; available in 12". For a new job, simply tool up a new dial. Readily combines with "MEADMATIC" Timer, Air Hammer, Air Press, Drill presses, etc.—to make almost completely automatic machine — operator merely loads.

Write for full details.

MEAD
SPECIALTIES COMPANY
4114 No. Knox Ave., Dept. N128A, Chicago 41, Ill.

Mention Item NED-9130 when writing

TIMKEN Bearings
Assure Smooth Running — Long Wear



This is the only lathe of its size, type, and price equipped with Timken Tapered Roller Bearings.

These Timken bearings enable the Atlas to handle high speed jobs such as metal spinning, wood turning, and plastics machining as well as all metal turning work at normal speeds. They maintain spindle alignment—carry radial and thrust loads with low friction—assure enduring accuracy and lower maintenance.

In addition, there's the Atlas "Quick-Change" feature that slashes costly set-up time with instant selection of 54 threads and feeds. 16 spindle speeds from 28 to 2072 RPM provide a wide working range for handling jobs quickly, accurately, and economically.

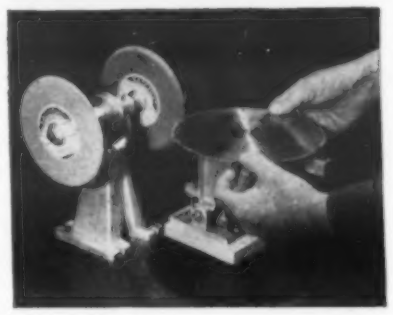
The new "Quick-Change" lathe catalog gives the facts and specifications. Send for it. See how the "built-for-wear" Atlas can save you money and speed production.

ATLAS PRESS CO.
1223 N. Pitcher St., Kalamazoo, Mich.

MATCHED PRECISION TOOLS FOR WOODWORKING AND METALWORKING

Mention Item NED-9131 when writing

SAW SHARPENING FIXTURE



Designed to maintain perfect roundness of circular saws, Treyco saw sharpening fixture holds and turns saws to insure precision sharpening. It brings saw teeth up to grinding wheels at right angles, and index grips each tooth as saw is turned clockwise.

Fixture is designed to sharpen three types of saws by using two grinding wheels. Wheel with 45-degree angle on one side is used for sharpening cross-cut or fine teeth on combination saws. Other wheel is 5/16-inch wide with radius for use on rip saws and for large teeth on combination saws. Fixture can be mounted on same base as wheels to provide self-contained unit. Made by **Treyco Products,** 264 Hartford Ave., Buffalo 17, N. Y.

Mention Item NED-9132 when writing

SCALE DIAL UNIT

Equally adaptable to heavy, medium and light duty industrial weighing, Tape-Drive cabinet dial attachment can be used with floor, industrial built-in, motor truck, tank and all types of overhead track and suspension scales. It employs accurate positive-drive mechanism using high-strength noncorrosive alloy tapes to replace formerly used rack and pinion. Adjustable self-compensating hydraulic dash-pot controls pointer action and prevents shocks from reaching mechanism. Up to four drop-weights can be put in or removed quickly to change capacity of scale by equivalent of dial chart for each weight added or subtracted. Made by **Howe Scale Co.,** 1030 Scale Ave., Rutland, Vt.

Mention Item NED-9133 when writing

AIR COMPRESSOR

Constructed of completely interchangeable standardized parts, Air-Flo air compressor can be changed to meet expanding requirements for air. Basic compressor uses 18 principal parts to construct line of 48 different models of 1, 2, 3, 4 or 6-cylinder pumps in single or two-stage types. Compressors are available in sizes from ½ to 40 horsepower with 2.5 to 275 cubic feet per minute capacity at 30 to 300 pounds pressure in vertical, V-type or side angle construction and with single, twin or radial staggered cylinder arrangements. Made by **Air-Flo Compressor Co.,** Akron 7, O.

Mention Item NED-9134 when writing

BETTER PRODUCTS from MARVINOL® VINYL RESINS

Marvinol . . . a modern vinyl resin . . . offers these important advantages to plastic and elastomeric processors and manufacturers:

1 Products made from Marvinol VR-10 have greater resistance to heat, light, aging, oils, acids, other destructive factors . . . superior flexibility at low temperatures . . . may be transparent, brilliantly or delicately colored.

2 High molecular weight gives Marvinol extra toughness and "dryness," yet it is easy to formulate into film, coatings or rigids.

3 Marvinol is a development of Martin research and experience . . . is being produced in the world's most modern chemical plant. The Glenn L. Martin Company does not compound or fabricate in the plastics field.

4 Technical cooperation is available through expert sales engineers and a fully equipped customer service laboratory. Write on your company letterhead to: Chemicals Division, Dept. NE-12, The Glenn L. Martin Co., Baltimore 3, Md.

Martin Marvinol

Resins, Plasticizers and Stabilizers Produced by the Chemicals Division of
THE GLENN L. MARTIN COMPANY—AN INTERNATIONAL INSTITUTION
"Better Products, Greater Progress, Are Made by Martin."

Mention Item NED-9135 when writing

SHOOTING AIR

TORNADO

1⅓ HP PORTABLE ELECTRIC BLOWER

cleans safely interior of motors and other intricate machinery with a powerful

320 m.p.h. air stream of pure, dry concentrated air from any electric outlet.

most powerful portable blower available. Acts instantly to sweep away all impurities and foreign matter—remove dirt, dust, lint and fuzz from bearings, gears, shafting and all moving equipment. Keeps mechanisms smooth-running—free from friction and heat.

Extra Feature. Simple suction attachments convert Blower into handy, portable vacuum cleaner swung from shoulder.

Also available in 1/3, 3/5 and 1 H.P.

WRITE FOR LITERATURE OR FREE DEMONSTRATION

BREUER ELECTRIC MFG. CO.
5098 Ravenswood Avenue
CHICAGO 40, ILLINOIS

Mention Item NED-9136 when writing

IDLE WORK-HANDS *play costly tunes . . .*

Skilled hands, temporarily incapacitated, are responsible for millions of dollars in industrial losses every year. Skin ailments, resulting from frequent exposure to industrial irritants *plus* the use of caustic washing soaps, are sour notes which throw production schedues off-key through excess absenteeism. Your plant is no exception in requiring safe-guards against these dangers.

West's Lan-O-Kleen hand cleanser, superfatted with a high content of lanolin, plays an important part in a dermatitis prevention program. Made of fine corn-meal, containing no harsh, gritty substances or excess alkali, Lan-O-Kleen thoroughly yet gently removes stubborn dirt, grime and grease from sensitive skins. In addition, it has beneficial emollient properties resulting from superfatting with lanolin.

Decide now to adopt the Lan-O-Kleen wash-up habit in your plant. Consult one of West's country-wide staff of sanitation specialists. He'll be glad to give you further details.

WEST LAN-O-KLEEN HAND CLEANSER

SAVE SOAP AND YOU SAVE EXTRA MONEY!

A modern, economical Lan-O-Kleen Dispenser regulates the amount of soap used—*prevents costly waste.* Readily adaptable for Bradley Fountains.

Send for this handsomely illustrated folder. It contains details of the dispenser, the healthful cleansing action of Lan-O-Kleen and complete washing instructions.

PRODUCTS THAT PROMOTE SANITATION

WEST DISINFECTING Company
42-16 West Street, Long Island City 1, N. Y.

Mention Item NED-9137 when writing

INDUSTRIAL MATTING
aids production 3 ways

It's safer! It's shock absorbing! It's skid-proof! Industrial men everywhere are using rubber link matting. BUILT TO FIT YOUR SPECIAL REQUIREMENTS.

Write for details:

KOFFLER SALES CORPORATION 3757C N. RACINE AVE. CHICAGO 13, ILLINOIS

▲ Mention Item NED-9138 when writing ▲

This Trouble-Free PIPE WRENCH Saves You Money

RIDGID Wrenches offer you exclusive advantages that save time, work and cash

● The important work-saver features which have made RIDGID the outstanding choice of pipe experts all over the world mean fast easy work and real economy for you. Housing is guaranteed against breakage or distortion—no repair expense or bother, ever. Adjusting nut in open housing spins easily in all sizes, 6" to 60." Handy pipe scale on hookjaw. Instant-action non-slip, non-lock jaws. Powerful comfort-grip I-beam handle. RIDGIDs save you time and money. Buy them at your Supply House.

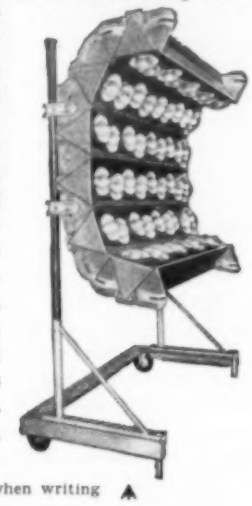
RIDGID *Strap Wrench won't mar polished pipe or tubing.*

RIDGID WORK-SAVER PIPE TOOLS
THE RIDGE TOOL COMPANY • ELYRIA, OHIO

▲ Mention Item NED-9139 when writing ▲

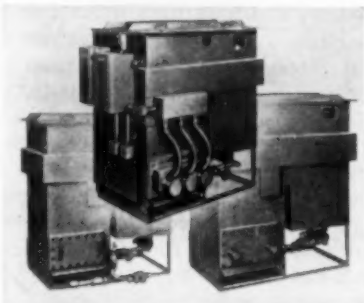
INFRARED DRYING SECTION

Mounted on base equipped with heavy duty Neoprene-tired wheels, Instant-Shape infrared drying oven is fully portable. Adjustable construction of infrared lamp section permits it to be adapted for drying products of practically any shape. Oven can even be formed into complete circular tunnel with top and bottom rows together. Type R-40 reflector lamps are staggered to assure even heating, and backs of lamps are enclosed with metal and asbestos panels to prevent heat loss. Oven section is tipped back wheelbarrow-fashion for moving. After positioning, nonskid feet prevent creeping. Units are available from stock having from three to ten rows of lamps. Made by **Wil-Son Mfg. Corp.**, 700 Huston St., Cloverport, Ky.



▲ Mention Item NED-9140 when writing ▲

DEGREASING EQUIPMENT



Two - dip, hand - operated model No. 625 degreaser is designed for rapid and safe cleaning of medium size metal parts of all kinds. Degreasing unit can be heated by steam, gas or electricity and can also be furnished for combined gas-and-steam or gas-and-electric operation. Conversion from one form of heating to another is effected readily. In operation, degreaser employs immersion-solvent-vapor process to remove oils, greases and similar materials at maximum speed. Parts to be cleaned are lowered into boiling solvent, transferred within machine to cool solvent rinse, and after several seconds, they are removed through solvent vapor zone. Cleaning process employs Perm-A-Clor solvent which is noninflammable.

Degreasing unit is of welded construction, fabricated of 10-gage steel plate and reinforced with structural steel. All interior surfaces are protected by molten zinc coating which is sprayed on after fabrication. Production capacity is rated 1000 pounds of steel parts per hour, and parts measuring up to 18 x 21 x 12 inches can be accommodated. Made by **Detrex Corp.**, P. O. Box 501, Detroit 32, Mich.

▲ Mention Item NED-9141 when writing ▲

DO YOU KNOW?

■ PRODUCTION of 'golden' plate glass, which excludes more than 99 per cent of ultraviolet rays in sunshine, has been resumed. Most recent use of this glass has been in television protective screens to filter out ultraviolet light. Light passing through glass is soft because of absence of glare. Glass is available in ¼-inch thickness and in stock sizes up to 100 x 150 inches. Made by Libbey-Owens-Ford Glass Co., Nicholas Bldg., Toledo 3, O.

▲ Mention Item NED-9142 when writing ▲

FOR PROOF BEYOND COMPARE
Send for
RUBYFLUID
Soldering Flux
Special Offer

For $1 Ruby will send you one pint of liquid and one half pound of paste soldering flux.

Try it! See for yourself the amazingly stronger, smoother and longer lasting unions you get when you use Rubyfluid.

Rubyfluid
Wets out freely . . .
Has no harmful fumes . . .
Acts quickly and saves time . . .

In addition Ruby will send you Free a new booklet on "How to Solder."

SEND YOUR $1 TODAY TO—

Ruby Chemical Co.
72 McDowell St.
Columbus, Ohio

Rubyfluid

▲ Mention Item NED-9143 when writing ▲

CUT PRODUCTION COSTS and INCREASE OUTPUT . . .
with
NEW ROCKWOOD BALL TYPE VALVES

1. Full round open area
2. Leak proof after continued use
3. New floating ball
4. No exposed seating surface in open or closed position
5. Easy to open under full pressure
6. Installed in any position
7. Quarter turn (90°) opening and closing valve

Rockwood Ball Type Valves have gained many satisfied customers by *cutting production costs, stepping up worker efficiency and increasing the output of materials handled.* If you are operating with valves that continually cause trouble, we urge you to change to the new Rockwood Ball Type Valves right away. Correctly installed, Rockwood Valves will give leak proof service, smoother performance and greater dependability—they also reduce maintenance cost.

Made in bronze with screwed ends, in all pipe sizes from ½" to 2", the Rockwood Ball Type Valve is recommended for use in oil refineries, food, paper, chemical and rubber plants, etc.

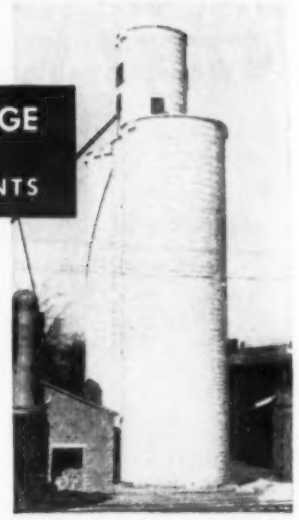
Write for folder V-4.

Distributors in all principal cities.

ROCKWOOD SPRINKLER CO.
44 HARLOW STREET WORCESTER 5, MASS.

▲ Mention Item NED-9144 when writing ▲

VERTICAL STORAGE THAT DEFIES THE ELEMENTS



Neff & Fry Bins Built For Little Elevator Co., Rockford, Ohio

During the last 32 years, Neff & Fry Storage Bins have withstood practically everything Nature offers . . . heat, cold, moisture, corrosion . . . even fire and storm. This is due to the stonelike properties of N & F Super-Concrete Staves, plus the erection technique.

The staves have matching grooved and beaded edges. Each stave interlocks with six adjacent ones. For contents which must be kept dry, dampproofing is accomplished by buttering the edges of the staves with mastic compound, coating the inside and outside of the bin with neat cement, and then adding two coats of waterproofing compound to the outside. To withstand internal pressure, the structure is bound with galvanized steel rings, as illustrated in the accompanying photograph.

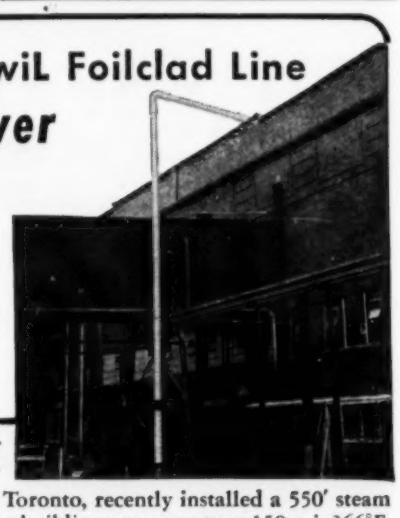
If you are interested in storage bins which last for generations, get all the facts about Neff & Fry Super-Concrete Stave Bins. Complete information is yours for the asking. Write, wire, or phone.

THE NEFF & FRY COMPANY, CAMDEN, OHIO

NEFF & FRY STORAGE BINS

▲ Mention Item NED-9145 when writing ▲

This Ric-wiL Foilclad Line Goes Over the Top to improve Steam Supply



Foilclad Units for this riser were connected on ground.

Canada Packers, Ltd., Toronto, recently installed a 550' steam line over the top of five buildings, to operate at 150 psi, 366°F. Conforming to varied roof contours, the entire line forms a huge expansion loop supported on the roofs. Foilclad Unit construction—with pipe and insulation protected by asphalt, asbestos felt, asphalt-bonded copper sheeting—assures thermal efficiency, corrosion resistance, durability, minimum upkeep.

For complete information write: The Ric-wiL Co., Dept. 17812.

RIC-WIL
INSULATED PIPING SYSTEMS
THE RIC-WIL COMPANY • CLEVELAND, OHIO
REPRESENTATIVES IN PRINCIPAL CITIES

▲ Mention Item NED-9146 when writing ▲

Good Judgement PAYS OFF!

Yes, good judgement paid dividends then . . . it will pay you dividends now when you select Bay State wheels for your grinding needs. This "good judgement" selection will give you consistently higher performance in countless everyday grinding jobs.

Here's why BAY STATE INTERNAL WHEELS are so widely used throughout industry today:

1. Take heavy, fast cuts.
2. Have exceptionally long life.
3. Are uniform in size and grinding action.
4. Are accurately centered . . . arbor holes parallel to face.
5. Afford consistent duplication, assuring uniform results.
6. Feature Bay State's exclusive fractional grades . . . three degrees of hardness in a single normal grade.

You will find Bay State's Operational and Specifications folder of real value. Write for it today.

Branch offices & warehouses Chicago — Detroit
Distributors — All principal cities

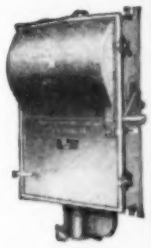
BAY STATE®

Top Performance Consistently Duplicated

BAY STATE ABRASIVE PRODUCTS CO., WESTBORO, MASSACHUSETTS, U. S. A.

▲ Mention Item NED-9147 when writing ▲

Switch, Fuse AND Circuit Breaker PYLETS



WFR Series Safety Switch Pylets

CKJ Series Circuit Breaker Pylets

For Reliable Service Under Most Severe Industrial Plant Operating Conditions

Heavy duty safety switches, fuse boxes with or without plug receptacles, and circuit breaker Pylets provide for reliable service under the most severe industrial plant operating conditions. WFR series safety switch Pylets have heavy cast metal case and cover, quick make and break mechanism interlocked with cover and with plug receptacle, and weathertight gaskets on both cover and hub plate. Safety switches without interlocking plug receptacles are also available. Circuit breaker Pylets, CKJ Series, are but one of the complete line of fuse and circuit breaker fittings, which offer features of sound design and substantial construction to assure reliable service. Consult your Pylet catalog 1100, Bul. 1150 for complete listings.

CONDUIT FITTINGS • FLOODLIGHTS

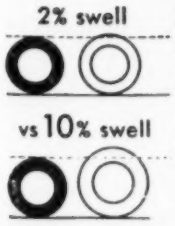
SINCE 1897

THE PYLE-NATIONAL COMPANY

1342 NORTH KOSTNER AVENUE, CHICAGO 51, ILLINOIS

▲ Mention Item NED-9148 when writing ▲

"131" one more SEALING MATERIAL *by Fel-Pro* for INDUSTRY'S new NEEDS!



As industrial techniques improve and basic materials change, new gasket and sealing problems arise. Fel-Pro paces these new needs with new materials like Rubber Compound Gasket Material No. 131! Proved with fuels, oils and solvents . . . on engines, compressors and high compression flanges . . . at minus 55 deg. F. to plus 300 deg. F. No. 131 shows 2% swell and retains resiliency for re-use where conventional materials show 10% swell and become brittle.

Get the Latest Sealing News! Get New Bulletins, New Catalog!

No. 131 is but one of the many new Fel-Pro sealing materials now perfected, in process, or under field tests by users. What's YOUR problem? The answer is in Fel-Pro's New Technical Bulletins and Catalog, or through Fel-Pro's Consulting Engineering Service. Just write! FELT PRODUCTS MFG. CO., 1510 Carroll Ave., Chicago 7, Ill.

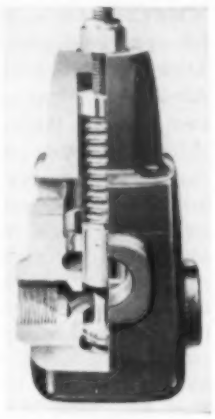
30th ANNIVERSARY YEAR

2878

FEL-PRO *for ALL Gasket and Sealing Needs*

▲ Mention Item NED-9149 when writing ▲

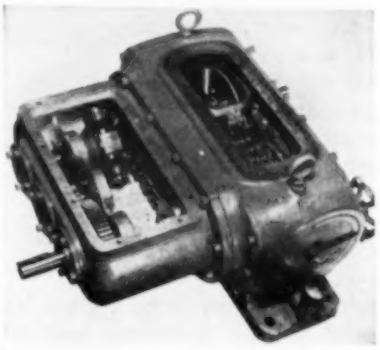
HYDRAULIC RELIEF VALVE



Intended to protect hydraulic systems against damaging pressure overloads, this relief valve incorporates dash pot to prevent chatter. Valve springs are supplied for 50-300 and 50-1500 pounds per square inch. Spring guide is available with O-ring seal when valve incorporates handwheel adjustment. Other features include pressure ports which permit in-line piping arrangement, one-diameter bore for accurate plunger fitting, and self-sealing locknut. Made by **Gerotor May Corp.**, Dept. K, P. O. Box 86, Baltimore 3, Md.

▲ Mention Item NED-9150 when writing ▲

TRANSMISSION

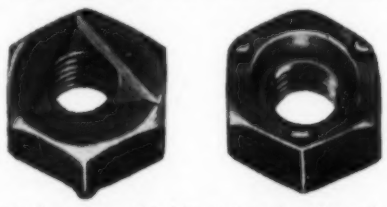


Consisting of mechanical differential attached to standard Link Belt PIV variable speed drive, Specon MD transmission provides infinitely variable speeds within wide ranges. Four models are offered to provide any desired speed either forward or reverse between 0 and 7000 revolutions per minute. Output torque is available from 20 inch-pounds to 15,460 inch-pounds. Capacities range from 1 to 20 horsepower. Desired speed is set by handwheel and indicated on large dial, and vernier dial can be furnished, if desired, to permit extremely close settings. Transmission is suited to many continuous industrial processes requiring accurate speed control at one or more points such as mixing of foods, chemicals and liquid ingredients. Made by **Speed Control Corp.**, Dept. B1, Wickliffe, O.

▲ Mention Item NED-9151 when writing ▲

SELF-LOCKING WELD NUTS

To overcome difficulty caused by particles of welding metal dropping into nut threads during welding process, bottom of Gripco three-point projection-weld self-locking nut is counterbored about quarter way through. Metal particles fall on counterbored portion instead of on threads. Thread depth is about same as in standard nut. Because top has double triangle thread-locking design, bolt locks into nut and will not loosen. Nut is suitable for use where application of nuts to bolts is difficult because of lack of space, where metal sections are too thin to thread, and for anchoring bulky or heavy products to shipping cases, frames or boxes. Made by **Grip Nut Co.**, 308-G S. Michigan Ave., Chicago 4, Ill.



▲ Mention Item NED-9152 when writing ▲

from the first day on!

Worthington YC Compressors arrive completely assembled. Installation costs less; no alignment problem; no erecting engineer needed — and the YC takes far less building and foundation space than same-capacity horizontals. Operating economy is assured by balanced Y-frame construction for higher rpm, instantly responsive 3- and 5-step variable capacity control, and Worthington Feather* Valves — most efficient ever made. Unusual accessibility and smaller spare parts cut maintenance costs . . . For facts proving *there's more worth in Worthington*, send for Bulletin L-667-B1A. *Worthington Pump and Machinery Corporation, Compressor Division, Buffalo, N.Y.*

No Other Compressor Will Outperform A Worthington

WORTHINGTON

*REG. U. S. PAT. OFF.

K8-13

▲ Mention Item NED-9153 when writing ▲

Pyrometer selection made easy in this new FREE book!

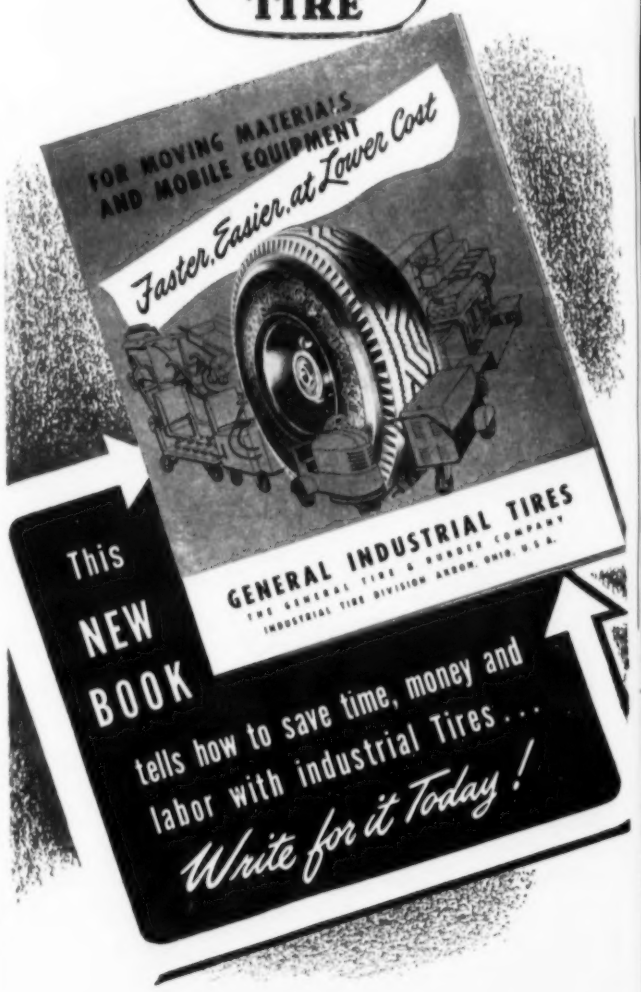
Ideal for direct mounting on engines, the FAX is dust-proof, splash-proof, sealed behind shatter-proof glass.

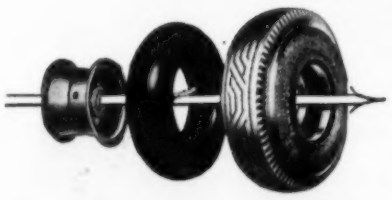
Are sustained, accurate and rapid temperature readings important in your business? If they are, this new book—showing the many types of Alnor precision-built Pyrometers—will be of invaluable assistance. In manufacturing or using machines where correct temperature readings are vital—diesel engines, heat-treating furnaces, ovens, pre-heaters, condensers, die casting machines and oil quenching tanks—Alnor has the *right* Pyrometer! Send for free copy of Bulletin 4361. Illinois Testing Laboratories, Inc., Room 529, 420 N. La Salle Street, Chicago 10, Illinois.

Alnor PRECISION INSTRUMENTS FOR EVERY INDUSTRY

▲ Mention Item NED-9154 when writing ▲

The GENERAL TIRE





Factory assembled units: Heavy-duty tire, separate tube, heavy-duty demountable wheel and rim; 8" to 22" o.d. for loads of 180 to 1900 pounds per tire.

Manager, Industrial Tire Sales, Dept. 4
The General Tire & Rubber Co.
Akron, Ohio

Dear Sir,
Please send me, without cost or obligation, your new catalog which tells how to save time, labor and money with General Industrial Tires.

Name _____

Title _____

Company _____

City _____ State _____

▲ Mention Item NED-9155 when writing ▲

For a clean plant use INVINCIBLE Vacuum Cleaners

In any plant Invincibles remove more dirt, faster, and at less cost. Also valuable in removing or reclaiming scores of industrial materials. A size for every plant; backed by over 40 years experience in industrial vacuum cleaning.

Send for Illustrated Bulletin!

INVINCIBLE VACUUM CLEANER MFG. CO.
DOVER, OHIO

▲ Mention Item NED-9158 when writing ▲

For SHEARING Cold Metal

"RED STREAK"
Forged Rotary Shears

In cutting sheet or strip metal up to .250", Simonds Shears deliver top performance either singly or in gang-slitting setups. Made of special Simonds steel, super-sharpened and accurately ground, these precision cutting tools stay on the job with fewest trips to the grinder. Made in High Chrome, Special Alloy, and High Speed Steel, for every type of job. Order from your Distributor.

"Tungsweld" Shear Blades

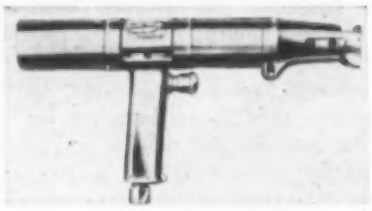
For cutting thin metals, there's nothing to match the welded high speed steel cutting edge of "Tungsweld" Blades. Substantial savings are made in cutting unannealed sheets up to 16-gauge, and annealed sheets up to 3/16". "Tungsweld" Blades boost production and cut sharpening time and costs. Order from your Distributor.

SIMONDS SAW AND STEEL CO.
FITCHBURG, MASS.
Other Divisions of SIMONDS SAW AND STEEL CO. making Quality Products for Industry
SIMONDS — Special Electric Furnace Steels
SIMONDS — Grinding Wheels and Grains
SIMONDS — Simonds Products for Canada

SIMONDS METAL-CUTTING SHEARS

▲ Mention Item NED-9159 when writing ▲

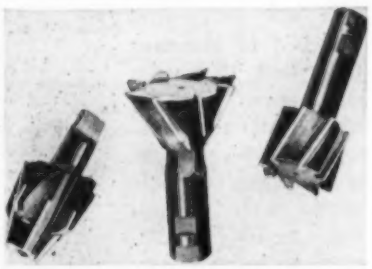
PNEUMATIC SAW & FILE



Having same size as previous model (*See Dec. '45 NED*), Air-Speed pneumatic saw and file incorporates numerous mechanical improvements. Breather holes have been redesigned to provide positive exclusion of abrasive elements. Reciprocating air valve has been replaced by heavy-duty unit, and new piston leathers increase power and reduce use of compressed air. Shifting spring element has been changed to eliminate excess strain. Improved component parts are fully interchangeable with those of earlier models. Made by **Air-Speed Tool Co.**, 1500 W. Slauson Ave., Los Angeles 44, Calif.

▲ Mention Item NED-9160 when writing ▲

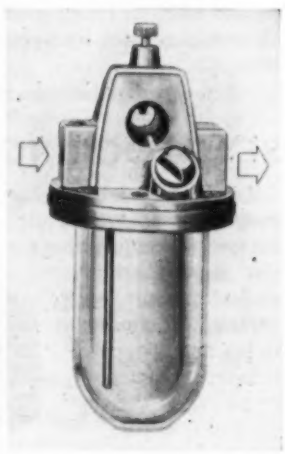
CARBIDE TIPPED MILLS



End, taper, face, chamfer and outside diameter can be cut in one pass by means of special form reamer shown in left of illustration. R.H. Cut Form milling cutter and R.H. Cut End mill, shown center and right of illustration respectively, are also carbide tipped to permit rapid cutting operations with minimum down-time for tool resharpening. Tungsten carbide inserts are electronically brazed into faces of cutting points. Made by **U. S. Carbide Tool, Inc.**, 3264 E. 49th St., Cleveland 4, O.

▲ Mention Item NED-9161 when writing ▲

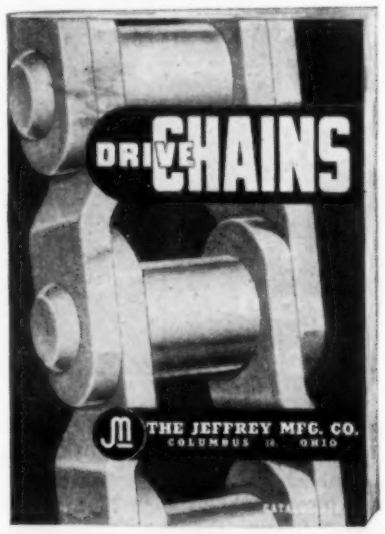
AIR LINE LUBRICATOR



Intended for installation on lines serving compressed air operated tools and equipment, series RL automatic lubricator meters oil into air stream as fine mist to aid in reducing friction and heat and prolonging life of air powered equipment. It consists of body to which pipe connections are made and transparent plastic bowl containing supply of lubricating oil. Rate of oil flow is visible from both sides and can be controlled accurately by needle valve. Only attention required is filling bowl with approximately ½-pint of oil, and this can be effected without shutting off line pressure. Since oil is injected only when air is flowing, oil consumption is kept at minimum. Made of noncorrosive materials, lubricator is available in ⅜ and ½-inch sizes for line pressures to 150 pounds per square inch. Made by **Hannifin Corp.**, 1127 S. Kilbourn Ave., Chicago 24, Ill.

▲ Mention Item NED-9162 when writing ▲

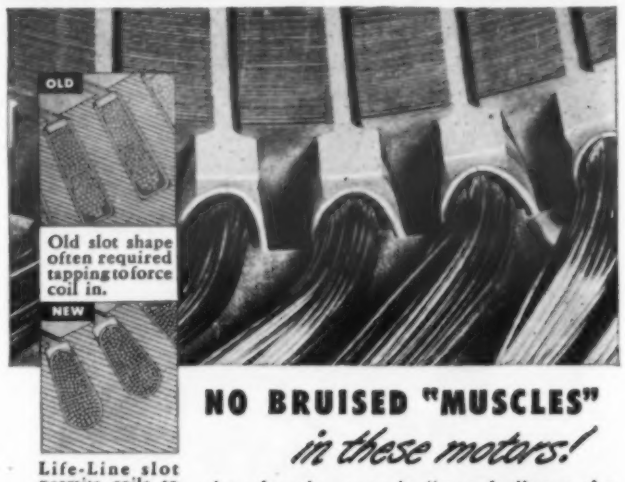
Send for Catalog No. 808 on DRIVE CHAINS



New 60-page book covers complete line of Jeffrey Steel Thimble Roller Drive Chains. Yours for the asking. Profusely illustrated. Shows types of chains available, various manufacturing processes and many typical applications. STR chain—from the smallest to the LARGEST and STRONGEST—is being universally used as a drive chain for every application. When you have need for such chains . . . call on Jeffrey, their originator.

JEFFREY
THE JEFFREY MANUFACTURING CO.
952-99 N. Fourth St., Columbus 16, Ohio

▲ Mention Item NED-9163 when writing ▲



Life-Line slot permits coils to be inserted snugly, easily.

NO BRUISED "MUSCLES" *in these motors!*

An electric motor's "muscles" are the coils of wire packed into slots in the stator. If bruised or damaged when put in, electrical failures result. Life-Line's new pear-shaped slots enable coils to be slipped into place without forcing, no slot corners are left to gather dirt or moisture.

Immediate delivery on standard ratings 1 to 15 hp. Check for other ratings with your Westinghouse office or write Westinghouse Electric Corporation, P.O. Box 868, Pittsburgh 30, Penna.
J-21461

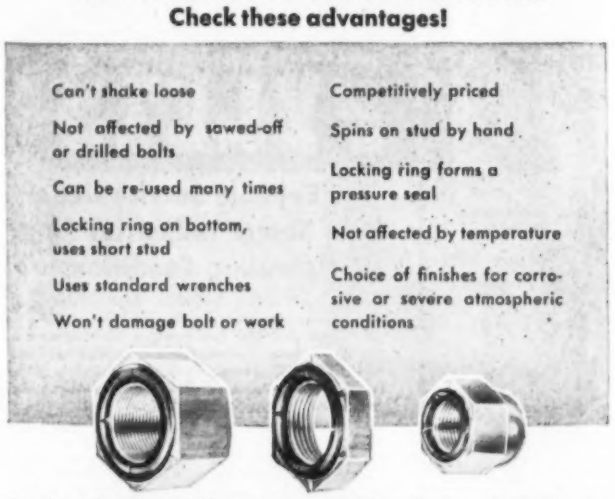
Westinghouse *Life-Line motors*

▲ Mention Item NED-9164 when writing ▲

THERE'S A RIGHT LOCK NUT FOR YOUR JOB!

Chances are four out of five it's An-cor-lox. Check these advantages!

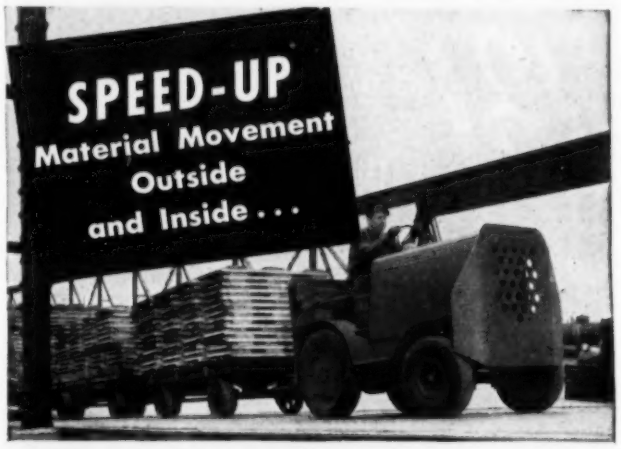
- Can't shake loose
- Not affected by sawed-off or drilled bolts
- Can be re-used many times
- Locking ring on bottom, uses short stud
- Uses standard wrenches
- Won't damage bolt or work
- Competitively priced
- Spins on stud by hand
- Locking ring forms a pressure seal
- Not affected by temperature
- Choice of finishes for corrosive or severe atmospheric conditions



Get the right lock nut! We strongly urge a careful testing and will be glad to have our engineers check special applications. Send today for our descriptive folder or free standard samples to fit your particular needs.

An-cor-lox Lock Nuts
TRADE MARK REGISTERED
LAMINATED SHIM CO., Inc., *An-cor-lox Division*, 0000 Union St., Glenbrook, Conn.
AN-COR-LOX NUTS • SHIMS • SHIM STOCK • STAMPINGS

▲ Mention Item NED-9165 when writing ▲



Plus-Power and great maneuverability of **SHOP MULE** tractors have earned their title of "America's Most Versatile Industrial Tractor." It's a general purpose unit for almost any size factory, yard, utility or transportation requirement and accommodates numerous equipment adaptations. Powered by International Harvester 30.5 H.P. engine, full pneumatic tired, turning on 90" radius, it's exactly right—and priced right too. Parts and service world-wide.

Detailed specifications and illustrated literature sent promptly on request.

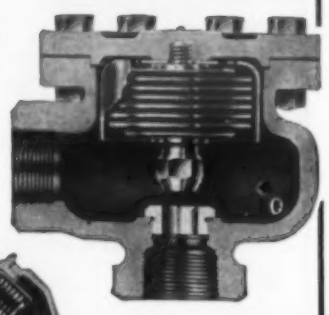
SHOP MULE INDUSTRIAL TRACTORS

W. F. HEBARD & CO.
CHICAGO 16, ILL.
Division of The BUDA Company

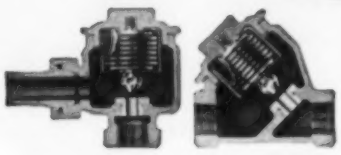
▲ Mention Item NED-9166 when writing ▲

Nicholson Steam Traps Show

PRODUCTION INCREASES UP TO 30%



2 to 6 Times More Drainage Capacity Speeds Circulation



Bulletin 1047 or see Sweet's

Plant records show that the unequalled drainage capacity of Nicholson thermostatic steam traps increases production up to 30%. Other reasons why an increasing number of leading plants are standardizing on Nicholson: operate on lowest temperature differential, 5° to 15°, depending on trap size and steam pressure; record low for steam waste (as low as 1%). 5 types for every purpose: size ¼" to 2"; press. to 225 lbs.

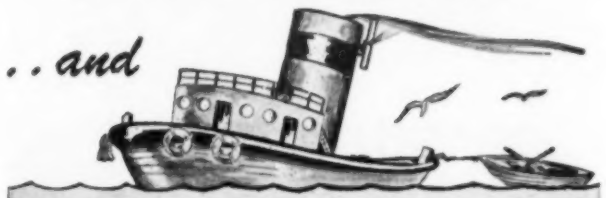
W. H. NICHOLSON & CO. 162 OREGON ST. WILKES-BARRE, PA.

Valves ★ Traps ★ Steam Specialties

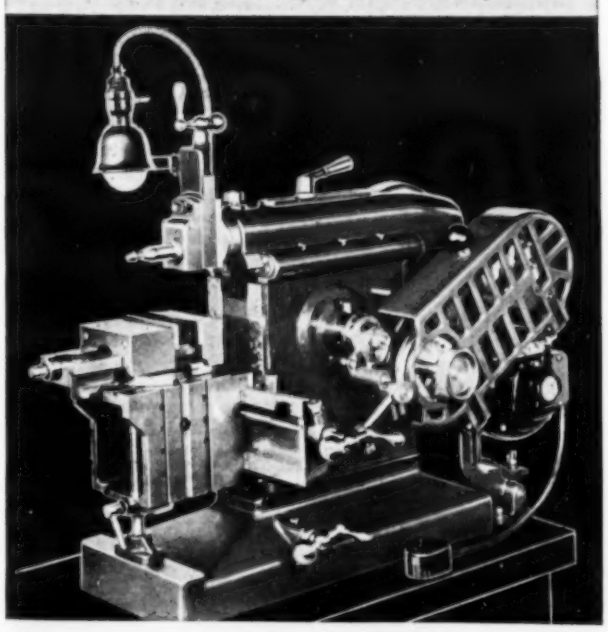
Mention Item NED-9167 when writing

WHY USE A TUGBOAT TO PULL A ROW BOAT

..and



WHY BUY A BIG, COSTLY SHAPER WHEN THE AMMCO WILL GIVE YOU TOP PERFORMANCE UP TO 7"?



Here is America's No. 1 Precision Shaper for all work up to 7". It is accurate—vibrationless, and on many jobs requires as little as two to three minutes set-up time. It handles a wide variety of work and cuts cost, saves time and labor.

The Ammco is a rugged machine—built for continuous operation—shaping jobs can be handled at lower cost and faster with the Ammco—and it will take care of 75% of shaping requirements in most plants. It has the features of larger, more expensive machines plus economy of operation—you can't afford to be without one or more.

Write for full information and a copy of our new shaper catalog No. NED-648.

You Can do it Better and Faster with AMMCO *Skill is Built into Every Ammco Product*

AMMCO TOOLS INC. COMMONWEALTH AVE. NORTH CHICAGO, ILLINOIS

Mention Item NED-9168 when writing

HOLLOW FORGED PIPE PLUG

Available in ¾ and 1-inch sizes, this hot forged and precision threaded pipe plug has been designed for cold working pressures of up to 3000 pounds per square inch on water, oil or gas handling systems. It is available in American standard pipe sizes and also with British Whitworth threads. Square head can be either black or galvanized. Plugs are sufficiently low in cost to be used on low pressure applications. Made by **Pittsburgh Pipe & Coupling Co.**, Allison Park, Pa.

Mention Item NED-9169 when writing

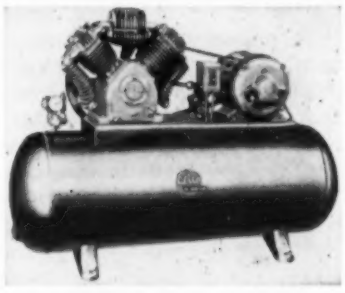
FLEXIBLE SHAFTS

Standard Stow flexible shafts were employed by H. T. Hunt Company to construct this gang boring machine to speed mill work on large quantities of 1 x 1½ x 57-inch pieces. Individual electric motors are bolted to one end of platform which serves as base of fixture, and then motors are connected to drills by means of Stow flexible shafts. Chuck and end of each shaft are held in position by wood clamp, and spacer is placed over flexible shaft end piece. Work to be bored is placed flat on fixture bed and fed forward into drills by moving slotted guide bar.

Boring tools can be relocated for handling various types of work with different hole spacing. Only change required in this case is new spacer piece which can be made to utilize any number of drills from one to five. Whole rig is readily portable and occupies little bench space. Flexible shafts made by **Stow Mfg. Co.**, 26 Shear St., Binghamton, N. Y.

Mention Item NED-9170 when writing

STATIONARY AIR COMPRESSOR



Line of stationary air compressors includes full range of models from ¼ to 5 horsepower, single and two-stage, and electric motor or gasoline engine driven. Illustrated model WH-508 is 5-horsepower two-stage compressor for general industrial and commercial use. It features replaceable cylinders, interchangeability of parts, precision type bearings, cast flange type intercoolers and aftercoolers, and full floating wrist pins. Intake and exhaust valve assemblies can be removed without disturbing air connections, and their parts are interchangeable. Assembly includes centrifugal pressure release, V-belt drive, air strainer and silencer, automatic start and stop control, and motor overload protection. Made by **Electric Sprayit Co.**, 1415-25 Illinois St., Sheboygan, Wis.

Mention Item NED-9171 when writing

INSTALL PORTELVATOR

Hamilton Portable Elevating Table

and *CUT PRODUCTION COSTS*

Stop idle machine time! When weight must be moved, send *one* man, and Portelvator.

Raises, lowers, transports, levels and supports overhanging work. Forms a work bench when and where you need it. May be worked at from all sides. One man can safely lift and carry loads usually requiring the strength of four.

Three table surfaces. Four point support. Fast lift and slow lift mechanism. Self locking at any height. *Will not tip or slip.* Positive floor lock.

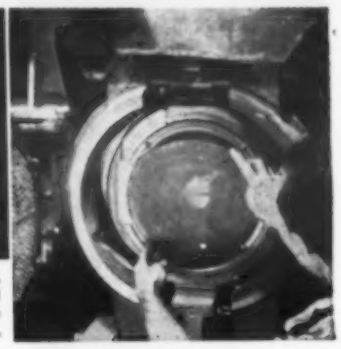
Standard model capacities 1,000 to 5,000 pounds. Special models designed and built on order. Write for Bulletin P-47.

THE *Hamilton* TOOL COMPANY — SUPER SENSITIVE DRILLING MACHINES · TAPPING MACHINES · PORTELVATORS

901 HANOVER STREET • HAMILTON • OHIO • U • S • A

Mention Item NED-9172 when writing

Cambridge **WIRE CLOTH and FABRICATIONS**



Cambridge Screen Discs give long life, trouble-free service in rubber- and plastic extruders. Screens are available in any metal, cut to any shape and size.

--"JOB-FITTED" to your installation

Whether your products are screened, filtered, or chemically treated, the Cambridge industrial wire cloth or wire fabrications designed especially for your problem are "JOB-FITTED" for maximum performance and operating economy.

Specific metals or alloys . . . certain meshes or weaves . . . are selected from our past engineering experience with the conditions under which your wire assemblies must be used.

FREE CATALOG listing and describing the entire line of Cambridge screen and filter cloth. Invaluable purchasing aid. Write for your copy today.

Call in your Cambridge engineer whenever you have a problem involving specialized wire screens or fabrications. There's a Cambridge Sales Office near you.

Cambridge Wire Cloth Co

Department C • Cambridge 12, Maryland

NEW YORK • BALTIMORE • PITTSBURGH • SAN FRANCISCO
BOSTON • DETROIT • CHICAGO • ST. LOUIS • HOUSTON

Mention Item NED-9173 when writing

..another *Texrope* Product!

FOR MORE productive machines, *Vari-Pitch* Speed-Changers provide multiple speed performance . . . increased flexibility. In hundreds of industries . . . on many types of machines, *Vari-Pitch* Speed-Changers are proving their value day after day by eliminating costly variable or multi-speed motors and complicated systems of speed control. Part of a long line of *Texrope* V-belt products, *Vari-Pitch* Speed-Changers provide the *right* speed for *every* operation. Send for bulletin 6013A. A 2288

ALLIS CHALMERS MILWAUKEE 1, WISCONSIN

Mention Item NED-9174 when writing

FILT-R-STIL* Demineralizers bring A BIG DROP IN YOUR COSTS

This is TAP WATER. It's cheap but the solids in it may cause costly production troubles.

This is DISTILLED WATER. It's pure, but expensive.

This is DEMINERALIZED WATER. It's chemically equal or superior to distilled water, yet costs only a small fraction as much. Utilizing a new, low-cost, no-heat method, FILT-R-STIL Demineralizers produce water chemically equal to, or better than distilled water at a possible 98% reduction in cost . . . *And* — they can be operated to deliver water containing a maximum of 10 ppm. of ionized solids — or a fraction of one part per million!

Investigate Cyanamid's low-cost FILT-R-STIL Demineralizers.

ION EXCHANGE PRODUCTS DEPT.

FILT-R-STIL* Demineralizers
IONAC* Ion Exchange Resins
*Reg. U. S. Pat. Off.

AMERICAN CYANAMID COMPANY

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

N.E.D. 8

☐ *Send 26-page booklet, "FILT-R-STIL Demineralizers."*
☐ *Send data on low-cost Silica-free water.*
☐ *Send description of new film on water demineralization.*

Name.....
Company.....
Address.....
City and State.....

Mention Item NED-9175 when writing

EXTREMELY TOUGH—

HIGHLY RESISTANT TO
ACIDS — CAUSTICS — OILS AND GREASES

Neoprene Latex
INDUSTRIAL
GLOVES

4 POPULAR STYLES

★ No. 5760-5, 18" LONG
EXTRA LONG GAUNTLET
GAUGE .030 TO .040
SIZES 10, 11

★ No. 5737-2, 14" LONG
LONG GAUNTLET
GAUGE .030 TO .040
SIZES 9-10-11-11½-12

★ No. 5705-5, 11" LONG
SHORT GAUNTLET
GAUGE .020 TO .025
SIZES 9-10-11

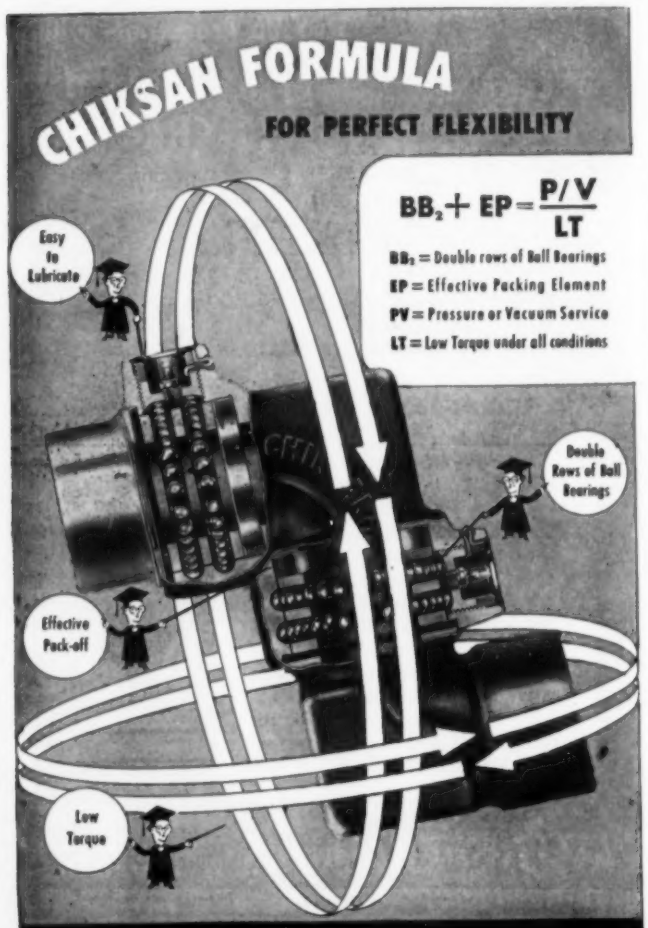
★ No. 5702-5, 10½" LONG
LIGHT DUTY
GAUGE .010 TO .012
SIZES 7-8-9-10-11

REQUEST SAMPLES
AND PRICES

SEIBERLING LATEX PRODUCTS CO.
AKRON, OHIO
200 - 5th Ave. Bldg., New York Merchandise Mart, Chicago

▲ Mention Item NED-9176 when writing ▲

CHIKSAN FORMULA
FOR PERFECT FLEXIBILITY



The CHIKSAN FORMULA
MAY BE THE ANSWER TO Your PROBLEM

Chiksan flexibility is so precisely engineered that the elements which provide for easy turning and perfect seal under pressure or vacuum can be stated in a few simple symbols. This streamlined design, expressed in precision manufacture, has won world-wide acceptance for Chiksan Ball-Bearing Swivel Joints wherever movement or rotation is required in pipe lines handling liquids, vapors and gases . . . in aircraft . . . electronics . . . railroads . . . chemical and food processing plants . . . refineries . . . marine installations . . . open hearth furnaces and rolling mills . . . and hundreds of other applications. The new Chiksan Catalog illustrates and describes over 500 different Types, Styles and Sizes. Ask for catalog No. 48.

REPRESENTATIVES IN PRINCIPAL CITIES

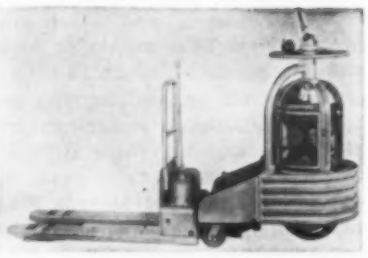
OUR 20TH ANNIVERSARY

CHIKSAN
TRADE MARK
CHIKSAN COMPANY
AND SUBSIDIARY COMPANIES
BREA, CALIFORNIA New York 7
WELL EQUIPMENT MFG. CORP. HOUSTON 1, TEXAS
MID-CONTINENT AREA
CHIKSAN EXPORT CO. BREA, CALIFORNIA - NEW YORK 7
EXCLUSIVE EXPORT REPRESENTATIVE

BALL-BEARING SWIVEL JOINTS FOR ALL PURPOSES

▲ Mention Item NED-9177 when writing ▲

INDUSTRIAL POWER TRUCK



Powered by single-cylinder air-cooled gasoline engine rated 2 horsepower with geared reduction, this Load Dispatcher pallet type industrial truck will handle loads of up to 3000 pounds. Truck speed is selected by throttle to which is attached governor that maintains constant speed from 1 to 3 miles per hour. One lever operates both drive and brake. Latch locks brake automatically. Because entire power mechanism is mounted on large ball thrust bearing in steering column, truck can be maneuvered easily. In addition to model illustrated, trucks are available in fixed platform and hydraulic lift platform types. Power mechanism is enclosed by screen guards, and truck is listed by Underwriters' Laboratories. Made by **Schwitzer-Cummins Co.,** Yandes at 22nd St., Indianapolis, 7, Ind.

▲ Mention Item NED-9178 when writing ▲

HIGH FREQUENCY HEATER

Redesigned Lepel high frequency heating units which are available in 7½, 15, and 30-kilowatt ratings now incorporate improved spark gap holders, fiber glass insulation in high voltage side of main transformer and all-steel enclosure. Units are applicable for use in heating ferrous or nonferrous materials. Heater without auxiliary equipment can be used for hardening, annealing, stress relieving, brazing, soldering and melting operations. In addition, heaters can be used with large variety of widely different sizes and shapes of work coils for heating various parts. Power does not drop off when metal being heated passes from magnetic to nonmagnetic stage or from solid to liquid state. Because units consume current only during actual heating cycle, economical operation is assured. Made by **Lepel High Frequency Laboratories, Inc.,** 39 W. 60th St., New York 23, N. Y.

▲ Mention Item NED-9179 when writing ▲

DO YOU KNOW?

■ SNOW slides easily from plow moldboards and wings that have been treated with Penn Drake snow plow wax. Coating is suitable for spray as well as brush application, and once applied, it creates hard slick surface that prevents piling. One-gallon covers approximately 300 square feet of snow plow working surface. Made by Pennsylvania Refining Co., 2686 Lisbon Rd., Cleveland 4, O.

▲ Mention Item NED-9180 when writing ▲

Brooks
LOAD LUGGER
Saves $5000 annually.....

"Through the use of the Load Lugger detachable truck bodies and one hoisting unit installed on one of our trucks we have eliminated re-loading into high truck bodies and can conservatively estimate our savings at $5,000 annually in labor alone". So writes one of the many hundreds of plant owners and engineers using this versatile materials handling system. Brooks Load Lugger is superior because it not only picks up or dumps fully loaded truck bodies in seconds but leaves flat truck bed free for general hauling purposes when needed. One-man operated, easily installed on any standard truck chassis. Body capacities — 1 to 10 cu. yds. Special bodies engineered to facilitate your particular materials handling problem. Write for free catalog showing applications.

Distributors in all Principal Cities

BROOKS EQUIPMENT & MFG. CO.
906 DAVENPORT RD., KNOXVILLE, TENN.

▲ Mention Item NED-9181 when writing ▲

NEW Barnstead DEMINERALIZERS

Produce
PURER WATER
for as little as
5¢ per 1000 Gallons

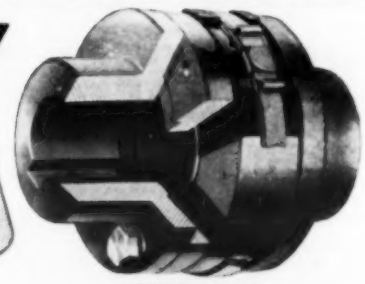
UTILIZING the new "Upflow" principle, and embodying many features of advanced design, these units effectively remove all dissolved metals and salts. They produce water of far higher purity at lower cost, and with less work and trouble. Model FR-2, illustrated, has flow rate of 80 gallons per hour. Other models from 3 to 1000 gallons per hour.

Send for bulletin 117 for full description and data.

Barnstead
STILL & STERILIZER CO. Inc.
16, Lanesville Terrace,
Forest Hills, Boston, Mass.

▲ Mention Item NED-9182 when writing ▲

Gasoline—
Diesel—
Steam—
Engines
can be set or timed with



TYPE "WQ"

LOVEJOY L-R
FLEXIBLE COUPLINGS

One set of this coupling's jaws is a removable ring, held in place with alloy steel cap screws. When this ring is pulled over, ample clearance for rotating either half of the coupling is quickly gained; a valuable consideration where it is necessary to set or time an engine without tearing down the assembly.

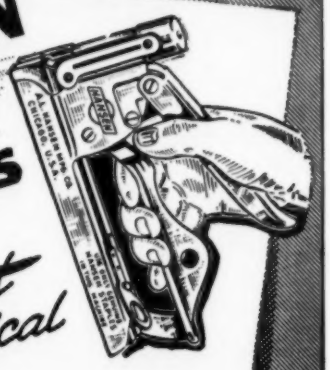
Other Lovejoy couplings are made in a wide range of sizes and types for *specific* applications, with four cushion materials available; and special materials for unusual applications.

Lovejoy catalogs and Selector Charts enable you to determine quickly and accurately the exact type of coupling necessary for your requirements. Write for these valuable engineering aids today.

LOVEJOY
FLEXIBLE COUPLING CO.
5003 W. LAKE ST., CHICAGO 44, ILLINOIS
Mfrs. of Lovejoy Variable Speed Transmissions

▲ Mention Item NED-9183 when writing ▲

HANSEN
one-hand
TACKERS
Fast
Efficient
Economical

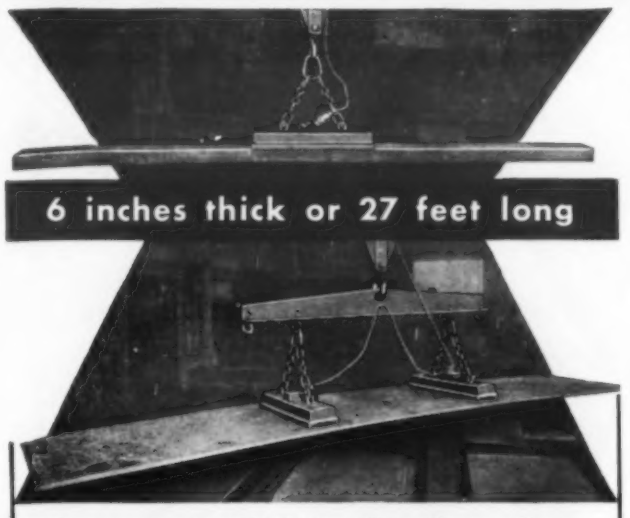


SPEED up your tacking, fastening and assembly jobs with the zip-zip action of Hansen one-hand Tacker. Self-contained, ready for instant, continual use.

Hansen Staples—precision made for quality work—are packed in the distinctive Hansen BLUE BOX. Eighty different lengths and widths. Single- and double-leg. Tacks, Tack-points, Chisel-points and Bevelpoints. REQUEST FOLDER

HANSEN
A. L. HANSEN MFG. CO.
5164 RAVENSWOOD AVE. CHICAGO 40, ILL.

▲ Mention Item NED-9184 when writing ▲

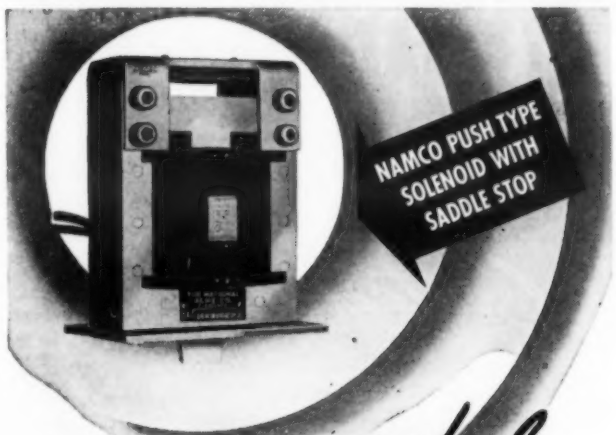


Save up to 90% in Handling Time with EC&M Plate Magnets

Place the magnet on the work, turn on the power and steel is transported without delay. No time lost in affixing chains—no danger of pinching hands—the crane operator often works without a ground-man. Send us the facts of your operations so that we may write fully when sending Bulletin 903 describing EC&M Plate-magnets.

THE ELECTRIC CONTROLLER & MFG. CO.
2698 EAST 79TH STREET • CLEVELAND 4, OHIO

▲ Mention Item NED-9185 when writing ▲



FOR *successful* SOLENOID OPERATION

We engineer them to your needs

A push—or a pull—built into your machine—can save time and money—if it's specifically designed to do the job *right*.

That's where Namco "Stellite"-Welded Solenoids shine. For some applications they'll even replace fractional horsepower motors; they're built in capacities up to 25 pounds—and custom-engineered to your needs, overcoming such hazards as oil, vibration and atmospheric conditions, if these are your problems.

If you want something more in the way of solenoid service than mere shelf-stock, hit-or-miss operation (not the kind that's good enough for toys and cheap household appliances)—if you want precision and uninterrupted trouble-free action on heavy-duty production-line jobs—then you'll want the best—Namco Solenoids. For the "how" of *successful* solenoid application, consult with us.

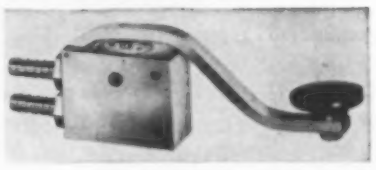
Namco "Stellite"-Welded Solenoids are built in a variety of sizes and mountings, both push and pull types, to meet every commercial application. The complete standard range is illustrated and tabulated in Engineering Bulletin EM-46. Ask for your copy.

ELECTRICAL MANUFACTURING DIVISION

NATIONAL ACME
CLEVELAND, OHIO

▲ Mention Item NED-9186 when writing ▲

THREE-WAY AIR VALVE



Poppet type models FT-101 and FC-101 three-way air valves are fitted with hose nipples to take from ⅜-inch inside diameter up to ¾-inch outside diameter hose. They are quick-acting with large air cylinders, require light touch and provide instant response. Mounting holes at both top and sides of rectangular valve body facilitate attachment to any machine for either cam or finger-tip operation. For the present, valves are supplied only in normally closed or 'off' type. Made by **Mead Specialties Co.**, Dept. FT-40, 4114 N. Knox Ave., Chicago 41, Ill.

▲ Mention Item NED-9187 when writing ▲

COMBINATION WRENCHES

Eight combination wrenches ranging in size from 13/64 x 7/32-inch to ⅜ x 7/16-inch are supplied in ½-inch thick plastic case which can be carried conveniently in pocket. Made of heat-treated and hardened chrome molybdenum alloy steel, tools have open end wrench on one end and 12-point box wrench on other. They are accurately broached to close tolerances. Made by **Meteor Mfg. Corp.**, 24 Glenwood Ave., Buffalo 8, N. Y.

▲ Mention Item NED-9188 when writing ▲

BAND FILING MACHINE

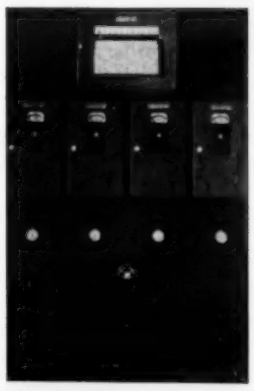
Rapid, accurate file finishing operations can be accomplished on this 7-inch capacity floor model band filing machine. Table is 18 inches square and 39 inches above floor level for worker's comfort. Built-in air pump with chip blowing nozzle on end of flexible tube makes it easy to follow guide lines. Tilting mechanism permits accurate bevel, miter or angle filing.

Optimum cutting speed for any material can be set instantly by means of Speed-master unit which controls surface travel of the 120-inch long continuous file from 50 to 250 feet per minute as shown by speed indicator. Three band sizes are available in widths of ¼, ⅜ and ½-inch and in six types of cut with flat, oval or round shape. Machine can be used on any parts from rough castings to accurate dies. Made by **DoALL Co.**, 254 N. Laurel Ave., Des Plaines, Ill.

▲ Mention Item NED-9189 when writing ▲

PROTECT YOUR PLANT AGAINST GAS HAZARDS

DAVIS REMOTE HEAD COMBUSTIBLE GAS ALARM SYSTEM measures flammable gases and/or vapor air concentrations in terms of their explosibility.



A four point Davis Continuous Sampling and Recording Combustible Gas Alarm System

Analyzer Head located in area being sampled indicates the gas and vapor hazards under actual temperature conditions. Changes are communicated to—

Control Cabinet in gas free area. When concentrations have reached the alarm point:

1. Red "bull's-eye" shows area causing the alarm
2. Alarm bell in cabinet rings
3. External audible signal sounds in area causing the alarm.

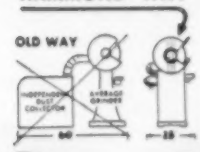
For complete technical details, write for Bulletin 1116-F.

INSTRUMENT DAVIS DIVISION
DAVIS EMERGENCY EQUIPMENT CO., INC.
54 Halleck Street, Newark 4, N. J.

▲ Mention Item NED-9190 when writing ▲

"BUILT-IN" FEATURE

SAVE OVER 50% FLOOR SPACE THE HAMMOND WAY



Hammond of KALAMAZOO

NO-DUST GRINDER

- Requires only 6½ square feet.
- Protects employees' health.
- Protects nearby machine tools against excessive wear from dust and grit.

A self-contained Grinder and Dust Collector for 10", 12" and 14" wheels. Write for Bulletin No. 104.

Hammond Machinery Builders INC.
1623 DOUGLAS AVENUE • KALAMAZOO 54, MICHIGAN

▲ Mention Item NED-9191 when writing ▲

MORE DRIVE ON THE JOB WITH THE RIGHT DRIVER FOR EACH JOB . . . . . .

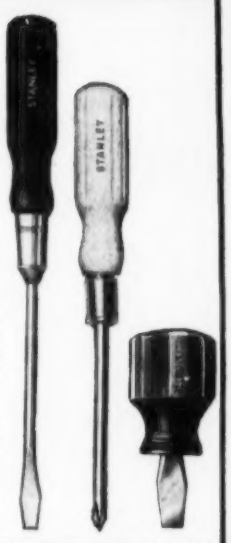
The right Stanley screw drivers for each job save valuable man-hours. Give a good man good tools . . . the right size, type and style for the different screws he's driving. See your industrial distributor. Stanley Tools, New Britain, Conn.

• • •

STANLEY No. 25 . . . blade lengths 3" up to 12"; deeply fluted hardwood handle; alloy steel blade tempered entire length. Bolster construction locks blade into handle and provides greater strength.

STANLEY No. 2702 . . . for Nos. 5 to 9 Phillips Recessed Head Screws, most commonly used sizes. Tempered blade secured in deeply fluted hardwood handle by ears swaged on shank. Other sizes available.

STANLEY No. 1009 . . . handy for tight places. Blade 1¾" long. Many other sizes in this popular construction. Unbreakable composition handle and special analysis alloy steel blade.



No. 23 No. 2702 No. 1009

THE TOOL BOX OF THE WORLD
STANLEY
Reg. U.S. Pat. Off.
HARDWARE · HAND TOOLS · ELECTRIC TOOLS

▲ Mention Item NED-9192 when writing ▲

UNITED Electric Controls Company

NEW INDICATING TEMPERATURE CONTROLLER

SENSITIVE RUGGED ADJUSTABLE

A new Indicating Temperature Controller designed for installation where accurate temperature control of gases, liquids, or metal-to-metal applications is vital and where periodic visual checks are required, advisable or will prove time-saving. Simply and ruggedly constructed, the new control applies the highly sensitive response motion of a solidly liquid-filled bulb and bellows assembly to a snap-acting switch and indicating pointer. Adjustment over its specified range is accomplished easily with a knurled thumbscrew at the top of the control. Dimensions of the case are 5½" x 5½" x 1¾". The control weighs 3 lbs. Standard ranges 50°F to 350°F and 50°F to 600°F are offered, or special ranges may be had between −120°F to +600°F. Standard differentials available ½°F in circulating liquid, 2°F in air. Switch ratings of 10 amp 125 V AC and 5 amp 250 V AC are offered. Other electric load ratings available.

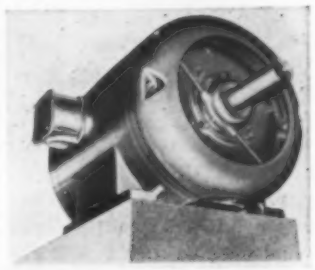
WRITE FOR COMPLETE DETAILS TODAY
UNITED ELECTRIC CONTROLS COMPANY
81 School Street, Watertown, Mass.

Standard & Special Thermostats & Pressure Switches

▲ Mention Item NED-9193 when writing ▲

▲ Mention Item NED-9196 when writing ▲

EXPLOSIONPROOF MOTOR



Line of totally-enclosed fan-cooled motors in 736 frame size is approved by Underwriters' Laboratories for class I group D and class II groups E, F, and G hazardous locations. Motors are available in ratings of 200 horsepower at speeds of 3500, 1750, 1160 or 870 revolutions per minute on 550 volts or less, and 150 horsepower at same speeds for operation on 2300 volts. They incorporate cast aluminum rotor with heavy-duty ball bearings, one-piece cast iron frame and externally mounted fan. Made by **Wagner Electric Corp.**, 6477 Plymouth Ave., St. Louis 14, Mo.

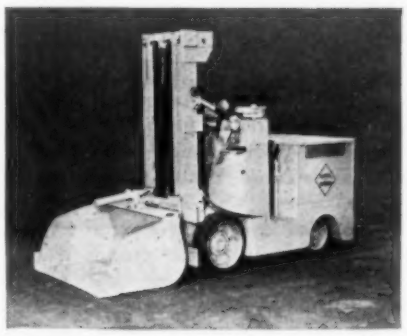
▲ Mention Item NED-9199 when writing ▲

AUXILIARY BENCH VISE

Spring take-up on screw of No. 1209 light-duty auxiliary bench vise provides for positive jaw action. Jaw moves on two steel rods by means of accurately threaded steel screw. Both jaws are accurately machined and smoothly finished to meet squarely, have width of 2½ inches, and open to 2¾ inches. Because of lightness in weight and clamp type base, vise is easily set up on job. Made by **Stanley Works,** Stanley Tools Div., New Britain, Conn.

▲ Mention Item NED-9200 when writing ▲

COMBINATION TRUCK & SCOOP



Designed to facilitate picking up, transporting and piling of loose materials, this electric power industrial truck is equipped with special type scoop which is attached to tilting and elevating mechanism. All controls are centralized at driver's station, and tripping device on scoop provides for rapid discharge of load. It also has pneumatic snubber to cushion impacts. When scoop is lowered to floor level, it assumes normal shoveling position. Upright column of truck can be tilted forward 5 degrees from perpendicular for shoveling and backward 15 degrees to avoid spilling and assure safe carrying.

Scoop capacity is 12 cubic feet, and it will carry loads up to 2000 pounds. Loads can be scooped at floor level and dumped at any height up to 117 inches. Truck speed is 5½ miles per hour. Made by **Elwell-Parker Electric Co.,** 4502 St. Clair Ave., Cleveland 14, O.

▲ Mention Item NED-9201 when writing ▲

That's right—Blaw-Knox Clamshell Buckets come in hundreds of types and sizes. Catalog No. 2076 makes it easy for you to specify exactly the right bucket for any job—any crane capacity . . . Send for it today.

BLAW-KNOX DIVISION
of Blaw-Knox Co.
2068 Farmers Bank Bldg., Pittsburgh, Pa.

BLAW-KNOX *Clamshell* BUCKETS

▲ Mention Item NED-9203 when writing ▲

Any consistency from downy softness to the hardness of seasoned maple board

ANY SHAPE IN ANY SIZE • ANY COLOR
ANY AMOUNT • ANY QUALITY • ANY WEIGHT • ANY THICKNESS

Whether your felt needs concern rolls, strips, square yardage . . . or precision cut felt parts . . . your order placed with Felters brings prompt, accurate delivery.

A copy of the Felters Precision Cut Felt Parts Manual will make your ordering of cut parts easier, quicker...write for your copy today.

THE FELTERS COMPANY
Makes the Felt for the Parts it Cuts
210-MSOUTH STREET, BOSTON 11, MASS.

▲ Mention Item NED-9197 when writing ▲

ARE YOU "STUMPED" BY YOUR SPEED REDUCTION PROBLEM?

• Input? • Output?
• Load Requirements? • Location?
• Engineering Data?

Send Coupon Below for *Abart* Speed Reducer Catalog

COUPON BRINGS BOOK RIGHT BACK!

Gives you latest full, clear information with authentic calculations, illustrations, diagrammatic drawings—the answers to your questions.

Over 75 types and sizes of reducers, spur, worm and combinations. Most modern, compact, precision built, oil-tight construction for long dependable service life. Use coupon or write fully on your problem.

Abart GEAR & MACHINE CO.

Abart Gear and Machine Co.
4822 W. 16th St., Chicago 50, Ill.
Please send Reducer Catalog
Name .....
Position with firm .....
Address .....

▲ Mention Item NED-9198 when writing ▲

Nothing could be simpler! Just stab a Dresser "No-Thread" Fitting over plain pipe ends, tighten the end nuts of the fitting with a wrench, and you have a permanent joint that's "flexible-tight". No exact pipe fitting or aligning needed.

Use them on gas, oil, air and water lines from ⅜" to 2" diameter. Available in regular and long couplings, ells, tees, etc. Write for catalog.

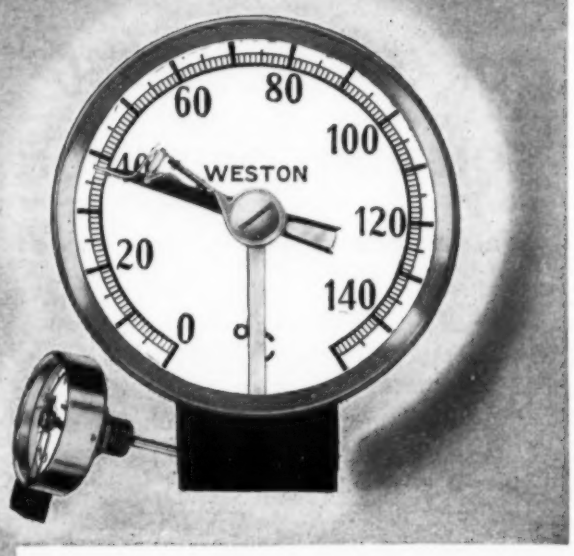
DRESSER "NO-THREAD" FITTINGS

Dresser Manufacturing Division (One of the Dresser Industries), 59 Fisher Ave., Bradford, Pennsylvania. Sales Offices: New York, Chicago, Houston, San Francisco.

▲ Mention Item NED-9202 when writing ▲

NEW—

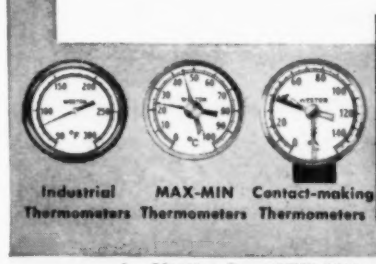
all-metal WESTON
Contact-making
thermometer



This new Weston combines the features of an indicating device with the advantages of an alarm or control instrument. A contact arm, mounted as shown above, is easily set to make contact at any temperature on the scale.

A terminal block on the periphery of the case makes electrical connection easy. The thermometer is all-metal, typically WESTON in ruggedness and reliability, with accuracy of ±1% as an indicating thermometer, and ±1½% as a contact making device. It is supplied in two types—for operation on either increasing or decreasing temperatures.

For complete information see your local WESTON representative or write Weston Electrical Instrument Corporation, 663 Frelinghuysen Avenue, Newark 5, New Jersey.



Industrial Thermometers MAX-MIN Thermometers Contact-making Thermometers

WESTON *Thermometers*

▲ Mention Item NED-9204 when writing ▲

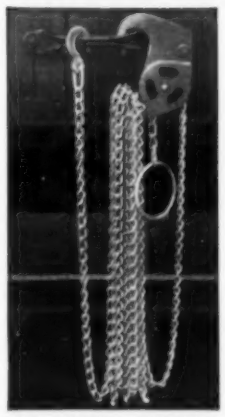
NEW GEON LATEX FILM-FORMING AT ROOM TEMPERATURE

★ There's a new Geon water-borne resin known as Geon Latex 31X that dries rapidly and evenly at ordinary room temperature. The deposited film is flexible but contains no plasticizer. It is odorless, resistant to grease and has low moisture vapor transmission. It won't support a flame. It adheres readily to paper, wood, fiberglas and textiles. We'll be glad to send our special bulletin giving complete details. Please write Department Y-6.

B. F. Goodrich Chemical Company
A DIVISION OF THE B. F. GOODRICH COMPANY
324 Rose Building • Cleveland 15, Ohio

▲ Mention Item **NED-9205** when writing ▲

SAFER-FASTER-BETTER
WAY TO OPEN BALKY BOX CAR DOORS!



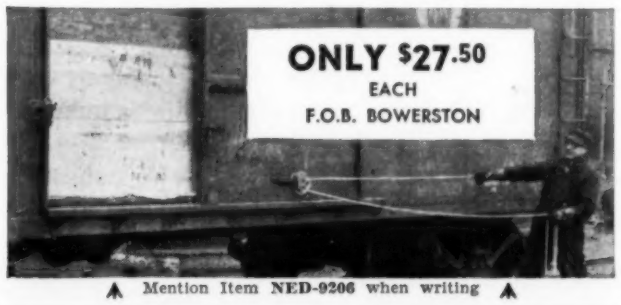
NOLAN ONE MAN CAR DOOR OPENER

One man can open the most binding balky box car door with the Nolan Car Door Opener. Get greater safety . . . speed loading and unloading schedules . . . order an ample supply to fill your needs today!

• No strained muscles. No slips or falls. No broken arms, legs or mashed fingers. No fatalities. No time wasted. No "gangs" needed. No time loss.

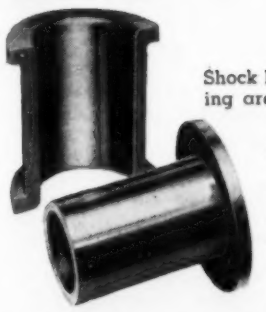
Write for free descriptive literature.

THE NOLAN COMPANY, 128 Pennsylvania St., Bowerston, O.
Formerly The Mining Safety Device Co.



▲ Mention Item **NED-9206** when writing ▲

Bearing Problems SOLVED! where



Shock loads, impacts and constant hammering are destructive to metal bearings—

Slow rubbing speeds or frequent reversing destroy lubricating film with metal bearings—

Shifting journal pressures cause metal bearings to gall and score—

Vibration or noise is troublesome—

Lubrication is limited or lubricants diluted—

Bearings are submerged in water or other liquids, including most organic chemicals in dilute form—

Dust, grit or corrosive gases are destructive to metal.

Whatever the service, send details for the GATKE Recommendation.

Moulded of special fabrics under heat and tremendous pressure, GATKE Bearings have performance qualities not obtainable in Metal Bearings. They give results you wouldn't hope to get.
Send for Bulletin HB-542.

GATKE CORPORATION
N. La Salle St., Chicago 1, Ill.

▲ Mention Item **NED-9207** when writing ▲

SMALL STEAM TRAP

Available for pressures from 0 to 150 pounds per square inch, Strong No. 070 steam trap is intended for small drainage jobs where condensate loads are light and economy of inverted bucket trap is desired. Recommended applications include use on tumblers, dryers, industrial unit heaters, kitchen equipment, sterilizers, autoclaves, and tire recapping equipment. Features include renewable seat, seamless deep drawn 18-8 stainless steel bucket, oversized ports, wear-resistant Anum-Metl valve and seat, and Hi-Cap orifice. Made by **Strong, Carlisle & Hammond Co.**, 1392 W. Third St., Cleveland 13, O.

▲ Mention Item **NED-9208** when writing ▲

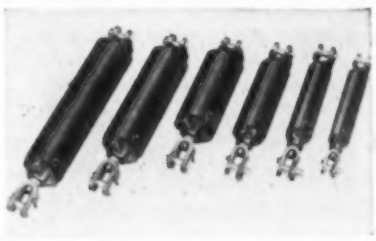
DEEP THROAT PUNCH PRESS

Added to standard line of Rousselle punch presses, this 15-ton model No. 2-G has 18-inch throat which permits working to center of 36-inch sheets. Bolster plates measure 11 x 16 inches, and shut die height is 7¾ inches to bed. Press has standard 2-inch stroke. Frame is one-piece semi-steel alloy casting which provides ample rigidity. Bed protrudes to allow clearance for jobs that might otherwise require horn press. Bed has 6-inch opening to permit blanks to fall through.

Press is equipped with single-stroke or continuous clutch, roller bearing flywheel, large air-cooled brake and hinged motor mount. It operates at 200 revolutions per minute with 1-horsepower 1750-revolution per minute motor. Made by **Service Machine Co.**, Dept. BB, 7627-33 S. Ashland Ave., Chicago 20, Ill.

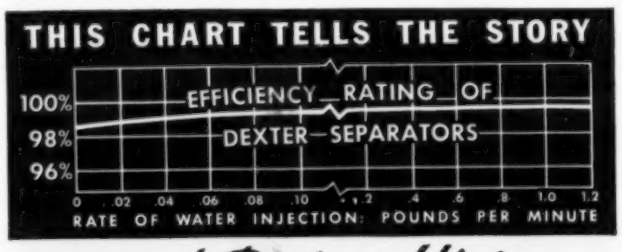
▲ Mention Item **NED-9209** when writing ▲

HYDRAULIC CYLINDERS



Intended for use on tractors and other mobile equipment, these hydraulic cylinders are lightweight, are made in several sizes, conform to Farm Equipment Institute standards, and are competitively priced. They are constructed of seamless tubing, and because heads rotate to any position, they permit plumbing connections to be made from any side or angle. Either mechanical or hydraulic depth stops are available. Made by **Bendix Aviation Corp.**, Pacific Div., Industrial Hydraulic Section, 11603 Sherman Way, North Hollywood, Calif.

▲ Mention Item **NED-9210** when writing ▲



of Dexter efficiency

After exhausting, scientific tests, here's *more* conclusive proof that Dexter Separators *really work!* Under high injection pressure (1.2 pounds per minute) a ½" Dexter Separator tested 99.9% efficient in removing moisture. Yet at the extremely low injection rate of .02 pounds per minute, this same Separator proved 98.8% efficient! Delicate instruments were needed to weigh and measure moisture elimination at low pressures. Yet final evidence remains the same — under all conditions, *Dexter Separators really work!*

IMMEDIATE DELIVERY on all popular sizes — *at less than prewar prices!* Write today for your copy of the Dexter Bulletin, "Clean, Dry Compressed Air."

Dexter Separators positively remove oil, water and dirt from compressed air lines, and expel them continuously. No filter pads to change, no bearings, no whirling gadgets. *It's automatic!* S-73

The LEAVITT MACHINE COMPANY
190 East River Street, Orange, Mass.
Dexter **AUTOMATIC SEPARATORS**
ALSO MAKERS OF DEXTER VALVE RESEATING MACHINES
ATHOL PLUMBING SUPPLIES AND DEXTER LATHE CHUCKS

▲ Mention Item **NED-9211** when writing ▲

A LITTLE RELAY with heavy-duty contacts

Conservatively rated at 15 amps. 115 volts A.C. Only 1⅞" x 2¾" x 2".

This Struthers-Dunn Midget Relay 1HXX36 is made for trouble-free performance on a long list of heavy-duty control applications. It is Underwriters approved, has single-pole, single-throw, double-break ⅜" diameter fine silver contacts and is ruggedly constructed throughout.

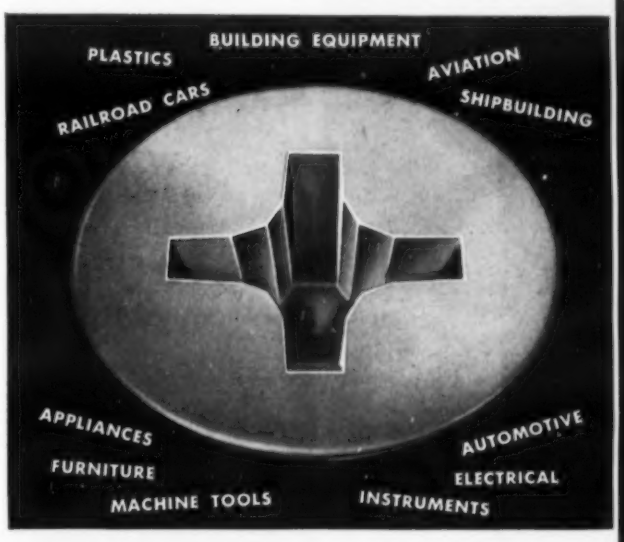
Hundreds of other Struthers-Dunn Midgets are available for practically all A.C. or D.C. control purposes. Write for Data Bulletin 1,58. Send details of your application for recommendation by S-D relay engineers.

STRUTHERS-DUNN
5,348 RELAY TYPES
Struthers-Dunn, Inc. • 150 N. 13th St. • Phila. 7, Pa.

▲ Mention Item **NED-9212** when writing ▲

ONLY PHILLIPS

RECESSED HEAD SCREWS ARE ACCEPTED AS STANDARD IN ALL INDUSTRIES



One cross recessed head screw, PHILLIPS, is the accepted standard throughout industry. In the 13 years since its introduction, one industry after another has recognized its obvious advantages.

Virtually the entire automobile industry has standardized on Phillips . . . lists them in their Standards Book. Similarly, Phillips Screws are standard in most of the major aircraft plants.

Such universal acceptance by industry everywhere is the best possible evidence that Phillips Screws alone have *all* the qualifications essential to a cross recessed head screw for practical production driving.

For unequalled mechanical superiority, for dependable uniformity, for unlimited supply potential, for universal acceptance, specify PHILLIPS.

GET THIS NEW BOOKLET of facts that prove the top value, top economy of Phillips Recessed Head Screws. It's free . . . use the coupon.

GET ALL THE ADVANTAGES OF ASSEMBLY WITH CROSS RECESSED HEAD SCREWS . . . GET

PHILLIPS *Recessed Head* SCREWS

Wood Screws • Machine Screws • Self-tapping Screws • Stove Bolts

27 SOURCES

American Screw Co. • Camcar Products Co. • Central Screw Co. • Continental Screw Co. • Corbin Screw Div. of American Hardware Corp. • Elco Tool & Screw Corp. • The H. M. Harper Co. • Lamson & Sessions Co. • Milford Rivet and Machine Co. • National Lock Co. • National Screw & Mfg. Co. • New England Screw Co. • Parker-Kalon Corp. • Pawtucket Screw Co. • Pheoll Manufacturing Co. • Reading Screw Co. • Rockford Screw Products Co. • Russell Burdsall & Ward Bolt & Nut Co. • Scovill Manufacturing Co. • Seaboard Screw Corp. • Shakeproof Inc. • The Southington Hardware Mfg. Co. • The Steel Company of Canada, Ltd. • Sterling Belt Co. • Stronghold Screw Products, Inc. • Wales-Beech Corp. • Wolverine Belt Co.

Phillips Screw Mfrs., c/o Horton-Noyes Co.
1800 Industrial Trust Bldg., Providence, R. I. ND-36
Send me the new booklet—"How to Select Recessed Head Screws for Practical Production Driving".

Name .....
Company .....
Address .....

▲ Mention Item **NED-9213** when writing ▲

6 times THE POWER OF ORDINARY SOLENOID VALVES

GENERAL CONTROLS K-10 SERIES ELECTRO-MAGNETIC LEVER VALVES

CONTROLS: LIGHT AND HEAVY OILS, AIR, WATER, GAS, STEAM, REFRIGERANTS, etc. Suitable for pressures up to 1000 pounds and temperatures up to 400° F.

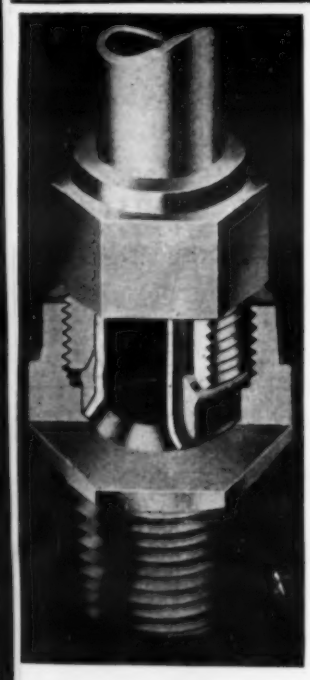
SIX TIMES THE POWER of ordinary solenoids assures high seating pressure and overcomes the blocking effect of viscous fluids, such as heavy fuel oil. Adequate power of solenoid insures positive operation. Normally closed or open types available.

Internal valve assembly can be removed for cleaning and inspection if necessary. Two-wire—A.C. or D.C.—current failure—packless construction—bronze body—stainless steel and bronze internal parts—soft seats available.

FOR COMPLETE SPECIFICATIONS request new Catalog.

GENERAL CONTROLS
801 ALLEN AVENUE GLENDALE 1, CALIF
Manufacturers of Automatic Pressure, Temperature, Level & Flow Controls
FACTORY BRANCHES AND DISTRIBUTORS IN PRINCIPAL CITIES

▲ Mention Item NED-9214 when writing ▲



NEW AND ONLY

TUBE FITTING

with these time- and cost-saving features

1. Self-contained—only two parts
2. Self-flaring—no flaring tools needed
3. Easy to connect—with ordinary wrench
4. Won't crack tubing in flaring
5. Tubing will burst before fitting will leak
6. Retains tight seal even after repeated reassembly

Uniflare TUBE FITTINGS
A Product of Scovill
Available in a complete range of sizes and shapes from your distributor. Write for free folder to Dept. 20.

A. SCHRADER'S SON
Division of
SCOVILL MANUFACTURING CO.
Incorporated
BROOKLYN 17, NEW YORK

▲ Mention Item NED-9215 when writing ▲

JUST OUT!

THE NEW SYNTHANE PLASTICS CATALOG

Interested in new ideas or suggestions that may help improve your product? Here's a new booklet on technical plastics that is full of useful information you won't want to miss.

It gives pertinent data on grades, sizes, properties, applications and forms of Synthane. Acts as a handy reference for planning with plastics.

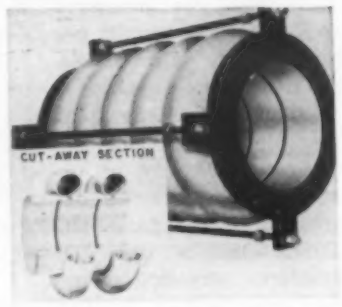
Write for your copy today!

SYNTHANE
TECHNICAL PLASTICS
SHEETS • RODS
TUBES • FABRICATED
PARTS • MOLDED-LAMINATED • MOLDED-MACERATED

SYNTHANE CORPORATION
Northeast River Road, Oaks, Penna.
Please send me a copy of the complete Synthane catalog.
Name
Name of Company
Title
Address
City State

▲ Mention Item NED-9216 when writing ▲

EXPANSION JOINT

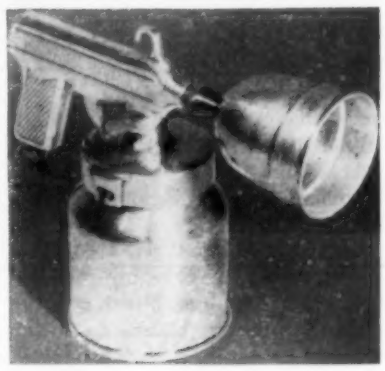


Axial, lateral, transverse or vibratory pipe line movement is taken up uniformly by each self-equalizing corrugation of this lightweight Omega expansion joint. Circular cross-section eliminates possibility of distortion; pressure merely puts metal under tension.

Joint can be furnished with inside diameter from ½-inch to 25 feet for any pressure from vacuum to 50,000 pounds per square inch. It can accommodate any temperature from subzero to over 2000° F. Cross-sections can be round, rectangular or special shape, and ends can be supplied for flanged, welded or screwed joints. All ferrous and nonferrous metals can be used, and joint can be furnished with lead or silver lining. Made by **Marquette Coppersmithing Co.,** Christian St. & Delaware Ave., Philadelphia 47, Pa.

▲ Mention Item **NED-9217** when writing ▲

COMBINATION BLAST GUN



Air-operated, portable, highly efficient Tornado combination blast gun is versatile adaptation of sand blasting and solvent spraying unit that simplifies production cleaning, finishing and surfacing operations. It can be connected to any air line for operation, and nozzle is changed easily for various applications. Gun is particularly suited for reaching relatively inaccessible places such as wheels, drip moldings, grill work, brick and rough finished walls, rungs and radiators.

Two attachments are supplied: abrading case-hardened nozzle is for use in blast operations and solvent nozzle for use with oils or chemicals. Gun is equipped with 3-pint container designed for quick, sure locking with quarter turn. Turbulence shield stops and retains bulk of spent abrasive that ricochets from work surface. Maximum air consumption is 9½ cubic feet per minute at 100 to 150 pounds per square inch pressure. Made by **Engineered Products Inc.,** Dept. A., 1224 Speer Blvd., Denver, Colo.

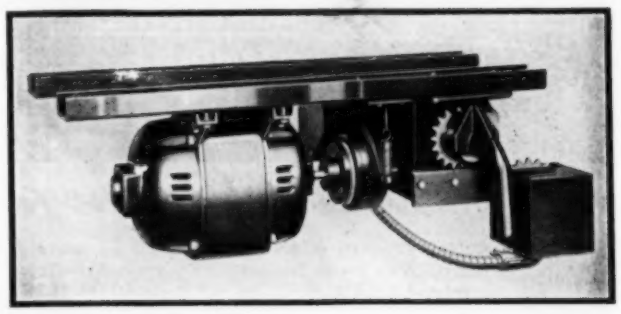
▲ Mention Item **NED-9218** when writing ▲

DO YOU KNOW?

■ MODELS of Towmotor fork lift trucks, tractors and accessories are now available to plant engineers and other executives interested in formulating efficient factory layout plans. These tiny models are accurately constructed on ¼-inch scale and will aid in visual planning of materials handling routes. Models are available to plant management at cost of $1.50 each. Available from Towmotor Corp., 1219 E. 152nd St., Cleveland 10, O.

▲ Mention Item **NED-9219** when writing ▲

BARBER-COLMAN



Electric DOOR OPERATORS ...FOR DOORS and GATES

SAVE time, save trouble, save money . . . improve efficiency, reduce heating costs, eliminate drafts, make door-opening easy . . . with Barcol Electric Door Operators. Models available for swinging, sliding, overhead, or steel rolling doors, and for sliding gates. Built-in safety features. See your Barcol representative for details, or write us for descriptive bulletins.

BARCOL

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES

BARBER-COLMAN COMPANY
108 MILL ST. • ROCKFORD • ILLINOIS

▲ Mention Item NED-9220 when writing ▲

"PEERLESS" HOISTS ASSURE MAXIMUM SAFETY IN LIFTING . . . .

plus the longer service life and the lower maintenance costs provided by the inherent advantages of steel construction and the specialized experience of more than 75 years' in the design and manufacture of hoists. For detailed information about these and other Harrington Hoist Products, write for Catalog P.

VISIT OUR EXHIBIT
BOOTH 303

NATIONAL MATERIALS HANDLING SHOW
PHILADELPHIA--JAN.10-14,1949

Reduce Your Costs

ALL-STEEL "PEERLESS"
THE HARRINGTON CO., PHILADELPHIA 30, PA.

▲ Mention Item NED-9221 when writing ▲

With rare exceptions on commercial and industrial installations

Ordinary Fuses and Breakers Do Not Protect Except Against Short-Circuits . . . but

FUSETRON
DUAL-ELEMENT FUSES

Provide 10 Point Protection -

Count 'em:

1. Protect against short-circuits.
2. Protect against needless blows caused by harmless overloads.
3. Protect against needless blows caused by excessive heating — lesser resistance results in cooler operation.
4. Provide thermal protection — for panels and switches against damage from heating due to poor contact.
5. Protect motors against burnout from overloading.
6. Protect motors against burnout due to single phasing.
7. Give DOUBLE burnout protection to large motors — without extra cost.
8. Make protection of small motors simple and inexpensive.
9. Protect against waste of space and money — permit use of proper size switches and panels.
10. Protect coils, transformers and solenoids against burnout.

FUSETRON DUAL-ELEMENT FUSES Give All-Purpose Protection

One needless shutdown — or one lost motor — or one destroyed switch or panel — may cost you far more than replacing every ordinary fuse with a FUSETRON dual-element fuse.

Don't risk such losses — protect yourself by installing a FUSETRON dual-element fuse in every set of fuse clips throughout the entire electrical system.

BUSSMANN MFG. COMPANY
University at Jefferson, St. Louis 7, Mo.
Division McGraw Electric Company
FUSETRON is a trade mark of the Bussmann Mfg. Co., div. of McGraw Electric Co.

▲ Mention Item NED-9222 when writing ▲

SWING THE HANDLE

AND TURN THE WHEEL, TO STAMP ANY NUMBERS OR LETTERS YOU WANT, INTO STEEL, STAINLESS STEEL, CAST IRON, BRASS, FIBRE, PLASTIC, ETC.

THE EASY WAY

THE ACCURATE WAY

THE ACROMARK CO.

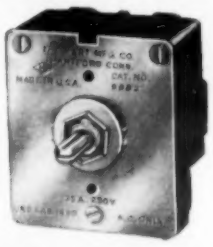
7-11 MORRELL ST., ELIZABETH 4, NEW JERSEY

"THE ORIGINAL MARKING SPECIALISTS"

Makers of—Marking, Numbering, Stamping and Embossing Machines, Tools and Fixtures, Nameplates, Engravers, Inks, Stamps

▲ Mention Item NED-9223 when writing ▲

ARE SWITCHES A PART OF YOUR PRODUCT?



CALL IN "DIAMOND H"

"Diamond H" Series 50 Switches such as that illustrated give dependable, economical performance in such products as hair dryers, ranges, washers, fans, griddles, portable heaters, coffee urns, battery chargers, test panels, hot plates, sterilizers, ironers, water heaters, as transformer tap selectors and in many other applications.

If you want to control several circuits with one switch, or merely need a small switch to do a small job well, ask "Diamond H". If one of our diversified line of standard controls doesn't meet your special requirements, we can engineer one that will. Ask us today.

Field engineers in Hartford, New York, Atlanta, Dallas, Cincinnati, Cleveland, Detroit, Chicago, Seattle, San Francisco, Los Angeles and Washington, D. C., Factories in Hartford, Toronto and London.

THE HART MANUFACTURING COMPANY

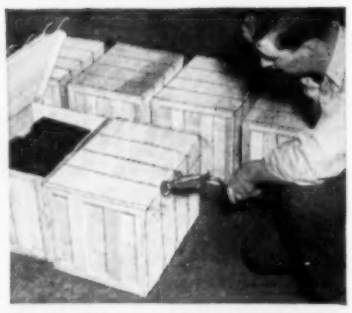
204 BARTHOLOMEW AVE. HARTFORD, CONN.

ROTARY SWITCHES • TOGGLE SWITCHES • PILOT LIGHTS
TEMPERATURE LIMITING SWITCHES • THERMOSTATS
CONVENIENCE OUTLETS

▲ Mention Item NED-9224 when writing ▲

CUTS COSTS WITH General Boxes

Fafnir Bearing Company, manufacturer of thousands of different types and sizes of bearings, packs many of its products in General Wirebounds. Illustration shows workman speedily securing box with toggle type closing tool. Write us today on how you, too, can save time, space and materials by packing your products in General shipping containers.



ALL TYPES OF ENGINEERED SHIPPING CONTAINERS

GENERAL BOX COMPANY

GENERAL OFFICES: Corner of Illinois and Dearborn Streets, Chicago 10, Ill.

DISTRICT OFFICES AND PLANTS: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon, Natchez, Continental Box Company, Inc.: Houston, Dallas.

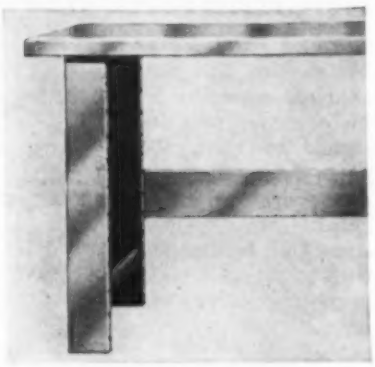
▲ Mention Item NED-9225 when writing ▲

POCKET-SIZE MICROSCOPE

Adjustable to 40, 50 or 60-power, this pocket-size precision microscope is no larger than ordinary fountain pen and draws out at eyepiece for required magnification. Hooded reflector and knurled collar for fine focusing are located at object end. Unit is equivalent of standard laboratory microscope and has fully corrected achromatic objective. Additional features include integral light-reflecting mirror, vernier focusing mechanism, Huygenian eyepiece, 20-millimeter focal length and satin-chrome finish. It is priced at $18.50 complete with leather carrying case. Made by **Buhl Optical Co.**, Dept. ED, 1009 Beech Ave., Pittsburgh 12, Pa.

▲ Mention Item NED-9226 when writing ▲

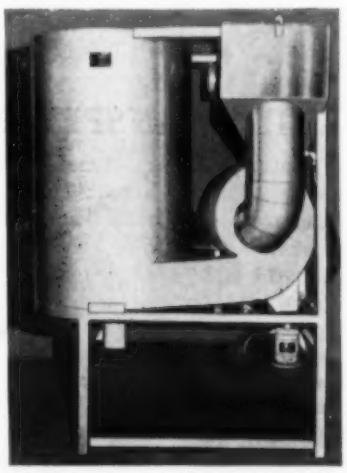
HEAVY DUTY STEEL BENCH



Fabricated with 11-gage prime steel top and 13-gage prime steel channel type legs, this heavy duty steel work bench is designed for long, hard usage. It is 32 inches high, 28 inches wide and 72 inches long. In addition to utilizing heavy gage material, bench is reinforced with cross members for added strength. Benches are shipped in individual cartons, and necessary nuts and bolts are included for rapid assembly. Made by **Tri-State Metal Products, Inc.**, Dept. 5, Box 1513, Pittsburgh 30, Pa.

▲ Mention Item NED-9227 when writing ▲

DUST SEPARATOR



Employing wet method and centrifugal force to remove dust and other foreign particles from air, this Niehous dust separator provides 2-inch static pressure for exhausting four regular size buffing or polishing wheels up to 16 inches in diameter. Where conditions require, unit will supply 4-inch negative pressure for three wheels, and maximum of 6 inches pressure is available for two wheels.

Separator unit consists of motor, pump and motor controls. It is designed for placement next to machines it serves, and clean air is discharged out of top. Refuse is collected in portable tank beneath unit. Made by **Industrial Electroplating Co.**, 217 W. Vermont St., Indianapolis 4, Ind.

▲ Mention Item NED-9228 when writing ▲

Produces Perfect Spray Patterns Faster! Easier! At Less Cost!

Black Arrow HOLLOW AIR Spray Gun

Production painters call Black Arrow's HOLLOW AIR Spray Gun the most sensational development in the spray gun field. That's because of its patented HOLLOW AIR Atomizer Head which, in terms of spray results, gives you five big advantages.

1. The widest, wettest, most uniformly distributed spray pattern you've ever seen.
2. Complete atomization of paint over the entire pattern.
3. No spotting at edges, no runs, sagging or orange peel.
4. More economical spray because HOLLOW AIR usually requires less pressure.
5. Much softer spray because HOLLOW AIR blends paint and air perfectly.

See your jobber! For catalog, write

Specifications of HOLLOW AIR Spray Gun

A heavy duty, high production gun. Handles all materials used in spray finishing. Especially advantageous when using synthetics. HOLLOW AIR available for either siphon or pressure feed. Forged aluminum alloy one piece body. Stainless steel nozzle, needle and cap assembly. Replaceable Thread Baffle Ring assembly. Weight 24½ oz.

BLACK

The Black Manufacturing Company

1428 W. BALTIMORE ST. • BALTIMORE 23, MD.

Beyond Compare—HOLLOW AIR

▲ Mention Item NED-9229 when writing ▲

MEMO to Machine Tool Men

HERE'S 2 New Timesaving Machine Tool Accessories Worth Investigating

1 GORTON Cross-Compound Rotary Table

Easy to use. Made to save time . . reduce costs. Designed for die, mold and toolroom work. Also handle various types of vertical milling and boring assignments. Made for center-line layout where cut is directly on workpiece according to print dimensions. Features: 15" rotary base; 18" saddle; 12" sq. table.

2 GORTON Multi-Spacer Indexing Fixture

Recommended for use on all appropriate types of milling, drilling, boring and grinding operations. Built-in automatic selector. Permanent index discs. No loose parts. Seven positions . . . 2, 3, 4, 6, 8, 12 and 24 divisions . . . available. Features 9" dia. table; sealed mechanism, vertical or horizontal set-up; base milled for either ½", ⅝" or 11/16" keys.

FREE BOOKLET. *Get complete information on these and other Gorton Timesaving Accessories by writing today for Free Bulletin No. 1317.*

GEORGE GORTON MACHINE CO.

1912 RACINE STREET • RACINE, WISCONSIN, U. S. A.

▲ Mention Item NED-9230 when writing ▲

NEW OZALID STREAMLINERS NOW AVAILABLE FOR IMMEDIATE DELIVERY

Now, you can order—and promptly receive—a new, moderately priced printmaking unit that gives you these 5 new advantages at no extra cost:

1. Speed. In 25 seconds an Ozalid Streamliner reproduces your engineering drawings...or anything typed, drawn, printed or photographed on *translucent* paper.

2. Efficiency. You always get an exact-size positive (not negative) copy direct from your original... produced in 2 quick steps—Exposure and Dry Development.

3. Economy. An 8½" x 11" print costs less than a cent and a half.

4. Versatility. The lines and images on your original can be reproduced in black, blue, red, sepia, yellow... on paper, cloth, foil, film, or plastic.

5. Simplicity. Anyone can be the operator. Place your original on Ozalid paper and feed into machine; that's 95% of the job.

THOUSANDS OF STREAMLINERS ALREADY INSTALLED

Users Include:

Armstrong Cork Company
Bethlehem Steel Corp.
Bloomingdale Brothers
Celanese Corporation of America
Chase National Bank of the City of New York
Dun & Bradstreet
E. I. DuPont
General Electric Company
International Business Machines Corp.
Mass. Mutual Life Insurance Co.
Pan American Airways, Inc.
Pittsburgh Plate Glass Co.
Remington Rand
Standard Oil Company
Westinghouse Electric Company

MAIL COUPON TODAY FOR FREE BOOKLET

OZALID DEPT. 218

Division of General Aniline & Film Corp., Johnson City, N. Y.

Gentlemen: Please send free, 24-page, illustrated booklet . . . showing all of Streamliner's uses and 10 types of Ozalid prints.

NAME _____

POSITION _____

COMPANY _____

ADDRESS _____

▲ Mention Item NED-9231 when writing ▲

turn the HEAT on Production

DC arc-welder users: Standardize on dependable P&H WA-200 machines—for faster work, lower costs

It is heat at the end of your electrodes that speeds welding, reduces costs. And, it's the ability of P&H WA-200 DC arc welders to produce this heat — hour after hour — that maintains stepped-up production schedules.

So, if you use DC arc welding machines, here are a few reasons why it pays you to turn the heat on production with WA-200's:

Simplified control speeds and improves the work — Operators obtain any desired welding current with one simple control.

More flexible service reduces your welding equipment investment—Square frame design permits stacking of machines, providing a more flexible service and a much wider welding range. *No other welder offers this advantage.*

Sturdy construction — There are only two major parts in a WA-200 — the husky one-piece frame and rotating member.

Dynamically balanced rotating member — is mounted in large grease-lubricated ball bearings.

Efficient cooling — through the use of a large multiple-*blade* fan.

WA-200's have a welding service range from 30 to 285 amps per single unit.

Let your P&H representative or distributor show you why WA-200's get your work out faster and save your money. Write us for Bulletin W34-4.

P&H DC WELDERS
4537 West National Avenue
Milwaukee 14, Wisconsin
HARNISCHFEGER CORPORATION

▲ Mention Item **NED-9234** when writing ▲

13 Times as Fast as a Hand Hoist!

Yet...

he One-Ton WHITING lectric Hoist Costs Only $230.00 F. O. B. HARVEY, ILLINOIS

You can release men and machines for productive work with high-speed Whiting Electric Hoists. Even when used only a few minutes a day, they pay for themselves in a very few months. Workers like them, too, because they make it easy to handle back-breaking loads. One man can install it without assistance, yet it is so rugged it stands up under heavy duty. Investigate its money-saving possibilities, today!

Whiting ELECTRIC HOISTS

Sizes ½, ½, 1, and -TON

Write for Bulletin H-100A

WHITING CORPORATION
15660 Lathrop Ave., Harvey, Illinois

☐ Send me a copy of your Bulletin H-100A.
☐ Send me the name of the Whiting distributor in my locality.

NAME _____
STREET ADDRESS _____
CITY _____ STATE _____

▲ Mention Item **NED-9235** when writing ▲

CUSTOM MADE WRENCHES

Custom made die-cut wrenches to fit special apparatus can now be obtained in small lots at relatively low cost. Service is particularly useful where special equipment and apparatus must be shipped with special wrenches. Wrenches can be supplied in up to 20-inch lengths and in thicknesses from 3/32 to ¼-inch. They can be made from any sheet stock, heat treated and finished to requirements. Made by **Dayton Rogers Mfg. Co.**, 2837 Twelfth Ave. S., Minneapolis 7, Minn.

▲ Mention Item **NED-9236** when writing ▲

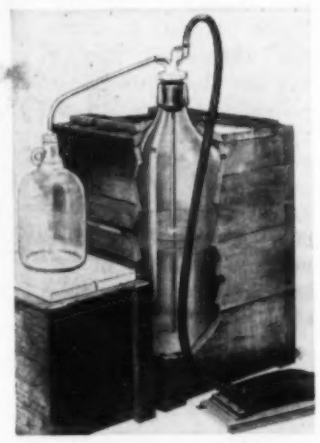
MECHANICAL SEPARATOR

Added to Roto-Finish line, this mechanical separator is motor driven unit designed to remove parts from chips or for separating mixed chips into various sizes. Unit is equipped with detachable tote pan shelf. Shaker screen assembly can be elevated from horizontal to inclined position with height of 4 inches on end nearest hoist pan. Screen assembly is tapered at discharge end and provided with vertical lift gate so that parts do not leave until separation is complete.

Separator can be used with Roto-Finish CW-45 or CW-60 hoist pan, and 32 x 27-inch screens with varying meshes are available for all sizes of chips. Drive can be either 110 or 220-volt, 3-phase, 60-cycle geared-head ¾-horsepower electric motor with control switch. Made by **Sturgis Products Co.**, 203 Jacob St., Sturgis, Mich.

▲ Mention Item **NED-9237** when writing ▲

ACID TRANSFER PUMP



Featuring improved metal-base pump for foot or hand-actuation, this G-S acid pumping unit (*see NED Jan.* '47) effects safe transfer of acids and other liquids from carboys, barrels or drums. All parts in contact with liquid being handled are corrosion resistant. Lead tubes are used for sulphuric, hydrochloric and similar acids and Saran plastic tubes for nitric, muriatic, citric and acetic acids and bleaches. Made by **General Scientific Equipment Co.**, 2701 W. Huntingdon St., Philadelphia 32, Pa.

▲ Mention Item **NED-9238** when writing ▲

WAR SURPLUS Bargains

CO_2 FIRE EXTINGUISHER

BRAND NEW 10 lb. capacity extinguishers . . . fully charged, ready to use . . . at great savings to you. Ideal all-purpose fire fighters. Latest model with quick discharge squeeze grip. Point the nozzle at fire . . . squeeze the handle . . . a cloud of fire killing snow snuffs out the fire quickly and effectively. No mess—no damage.

Present List $48.50
Our Price $36.50 F.O.B. Chicago

ALL STEEL Refuse Cans

Worth at least $15.00
Our Price 2 to 5 $7.00 ea.
6 to 50 $6.00 ea. Sample Can $8.00

Hundreds of uses for water-tight and waterproof cans like these in your plant, factory or warehouse. BRAND NEW. 64 gal capacity; 36" high. Sturdily made to take abuse, yet light enough for easy handling. Complete with tight fitting lid and drop handles.

Special price on large lots. F.O.B. Ill. Ordnance Depot, Marion, Ill.

Note. All sales in Illinois subject to Ill. Sales Tax.

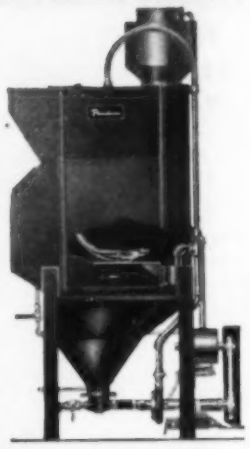
Write for our FREE Illustrated Circular of WAR SURPLUS BARGAINS.

126-28 So. Clinton St., Room 207, Chicago 6, Ill.

▲ Mention Item **NED-9239** when writing ▲

New PANGBORN "HYDRO-FINISH"

Holds Tolerances to .0001 Inch While: 1. Improving surface finish 2. Removing oxide scale 3. Increasing tool and die life



Pangborn "HYDRO-FINISH" is the remarkable new form of impact blasting using fine abrasive suspended in a liquid. This new "HYDRO-FINISH" process has unlimited applications.

In the Tool Room — for tool, die and mold manufacture and maintenance. This streamlined operation eliminates hours of hand work and produces a surface virtually free of directional lines.

In the Production Line — to eliminate many tedious operations, reduce buffing costs, improve fatigue life, cut manufacturing cost.

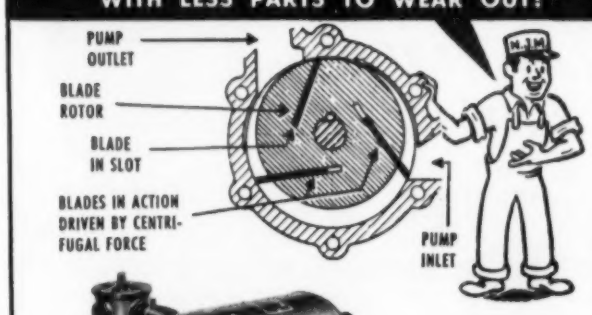
WRITE TODAY for complete information about the "HYDRO-FINISH" Cabinet that produces this new finish with maximum efficiency and economy. Come to Pangborn Corporation, 1294 Pangborn Boulevard, Hagerstown, Maryland.

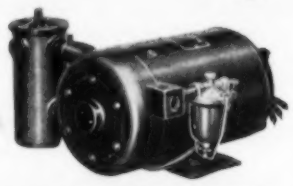
Pangborn
BLAST CLEANS CHEAPER
with the right equipment for every job

▲ Mention Item **NED-9240** when writing ▲

COMPACT VACUUM PUMP

WITH LESS PARTS TO WEAR OUT!





MOTOAIR PUMP

A HINGELESS ROTARY PUMP

BUILT FOR MACHINE DESIGNERS!

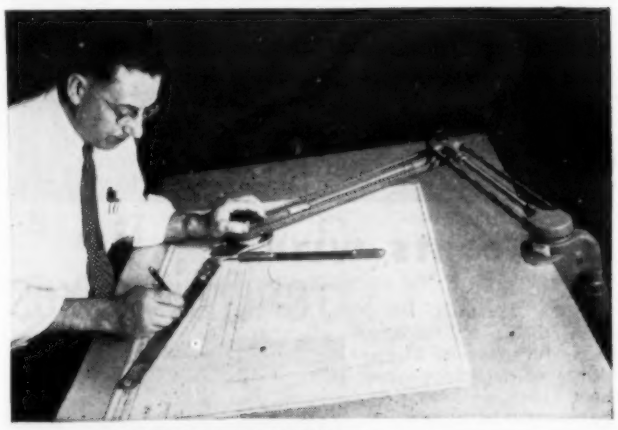
With mountings adjustable to any position—and overall size slightly longer than its motor—*all* in one housing with *no hinges, no gears, no belts* and no extended drive.

Ask for complete details

NEW JERSEY MACHINE CORPORATION
1530 Willow Ave. • Hoboken, N. J.
Factory offices in Chicago, Cincinnati, Los Angeles

▲ Mention Item **NED-9241** when writing ▲

NEW BRUNING



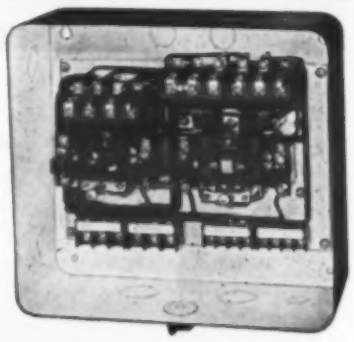
EQUIPOISE DRAFTERS

New smoothness in drafting—greater accuracy—unhampered speed are features of the new Bruning Equipoise Drafters—made in two models, Standard and Civil Engineer's. The Equipoise mechanism, a spring balancing device, assures accurate alignment of the machine at all times on an inclined drawing board. The Equipoise Drafter "floats" into any operating position without heavy brake drag. A revised protractor head assembly permits greater convenience in operation and maximum visibility—a new base line setting device for locking the protractor index point to any desired angle is simple in operation and positive in action. For complete information write Charles Bruning Company, Inc., 4730-78 Montrose Ave., Chicago 41, Ill.

BRUNING *Since 1897*

▲ Mention Item **NED-9242** when writing ▲

Bulletin 715 Multispeed Starter



A-B Quality

- Automatic multispeed starters
- Available for many types of motors

Allen-Bradley Bulletin 715 multispeed switches provide remote control of two-, three-, and four-speed squirrel-cage motors used on many types of machines. Double-break, silver-alloy contacts never need cleaning, and reliable solenoid contactors provide long, trouble-free operation. Available in ratings up to 400 horsepower. Allen-Bradley Co., 1334 S. Second St., Milwaukee 4, Wisconsin.

ALLEN-BRADLEY
QUALITY
MOTOR CONTROL

Mention Item NED-9243 when writing

GUARD YOUR PRODUCT *With Plastics*

Low-Cost Protection

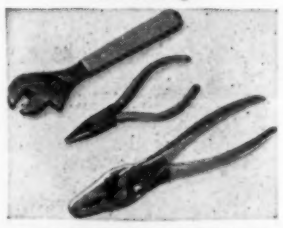
● G-E SEALING CAPS AND SLEEVES are General Electric's new type protective and tamper-proof seals. They are made of a tough plastics material and have excellent electrical properties. G-E SEALING CAPS AND SLEEVES are easily applied after being swollen in a G-E dilater. They quickly shrink to a tight fit. Oil, dust, moisture, and paint are locked out.

● G-E SEALING CAPS AND SLEEVES are doing a big job in a variety of industries—improving products, cutting costs, simplifying manufacturing operations.

Perhaps you have an application. For more information, send for free technical report. *Write Section AL-12, Plastics Division, Chemical Department, General Electric Company, 1 Plastics Ave., Pittsfield, Mass.*

PIPE PROTECTION
Keep dust and moisture out

THREAD PROTECTION
Guard machined parts from damage

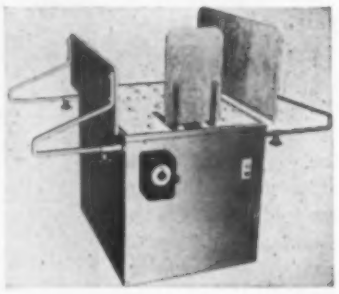


ELECTRICAL PROTECTION
Insulate a variety of tools

GENERAL ELECTRIC
CD48-32

Mention Item NED-9244 when writing

COUNTER & STACKER

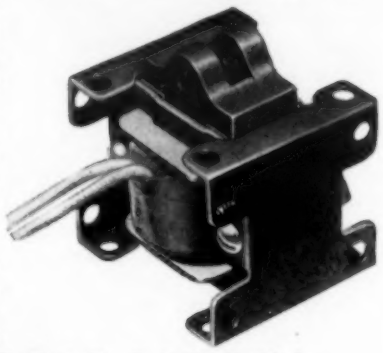


Designed for handling flat products, automatic counting and stacking machine counts objects as they come off production line at speed of up to 200 per minute, stacks them in piles and then transfers counted stack to conveyor system. It will handle pieces from 9 to 82 inches wide and transfer counted stack in 1/3-second. After it is plugged into standard outlet, machine is ready for service without need for setup. Made by **Superior Punch Press Co.,** 3608 Superior Ave., Cleveland, O.

Mention Item NED-9245 when writing

INDUSTRIAL SOLENOIDS

Designed especially for industrial applications such as valve operation and machine tool control, line of Decco solenoids is available in both push and pull types rated for continuous duty. Units are furnished for operation on all standard voltages and frequencies. Removal of two bolts in coil assembly facilitates coil change. Models No. 1, 2 and 3 have strokes ranging from ⅛ to ½-inch and exert force of from 4.5 to 11 pounds. Made by **Detroit Coil Co.,** 445 E. Fort St., Detroit 26, Mich.



Mention Item NED-9246 when writing

HAND TACKER

Especially suitable for use in restricted places where there is insufficient room to swing hammer, model T-5 trigger-action hand tacker places and drives staples without danger of marring material. Short narrow base enables it to drive staples within 1/16-inch of inside corners, rabbets, moldings, etc. Three models of tacker are available using light, medium and heavy wire staples of several different lengths for driving into wood and other materials. Machine weighs only 3 pounds. Made by **Bostitch,** 497 Mechanic St., Westerly, R. I.

Mention Item NED-9247 when writing

Let READY-POWER
Solve Your Trucking Problems

Ready-Power-Equipped Baker Fork Trucks Loading Semi-Trailers

Heavy loads and long hours can't stump Ready-Power gas-electric Power Units. They are designed to "take it" and built to last. They're better than good enough to handle the toughest jobs hour after hour, day after day with constant power generated right on the truck. Specify Ready-Power for your next electric truck or write for information about converting present equipment.

Visit the Ready-Power Display at Booth 435, 3rd National Materials Handling Exposition, January 10 to 14, Convention Hall, Philadelphia, Pa.

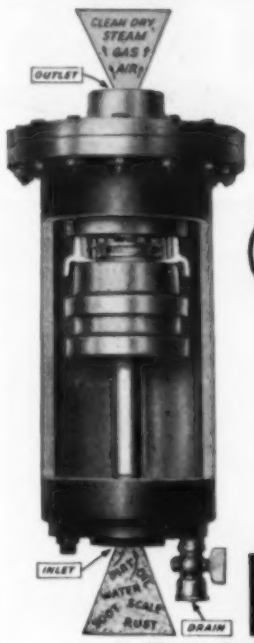
THE READY-POWER CO.
3832 Grand River Ave., Detroit 8, Michigan

West Coast Representatives: KARL MOELLENDICK, 7813 California Ave., Huntington Park, Calif.
(Delivery made from stock) GEORGE HUNDSDORFER, 1424—11th Avenue, Seattle, Wash.

Mention Item NED-9248 when writing

Deliver CLEAN DRY AIR *by this Exclusive Method*

No MOVING PARTS *No* FILTERS TO REPLACE *No* GUESSWORK



CMD TEXTITE AIR SEPARATORS

The accurately rated capacities of CMD Textite Air Separators assure ample C.F.M. volume to clean air and thoroughly dry it. Not mainliners; should be installed at or near point of use. Four sizes from 25 C.F.M. to 250 C.F.M. inclusive. For bulletins and complete technical data

Write To Dept. 12NED

CHICAGO MANUFACTURING & DISTRIBUTING CO.
1928 W. 46th St., Chicago 9, Ill.

Mention Item NED-9249 when writing

HASSALL cold-heading may solve your immediate special part problem...Special nails, rivets and threaded parts made in diameters from 1/32" to 3/8"—lengths up to 7"...Rivets 3/32" diameter and smaller a specialty...Variety of metals, finishes and secondary operations...Economy, quality and quick delivery in large or small quantities...Tell us what you need...We will answer promptly. **ASK FOR FREE CATALOG.** 3-color Decimal Equivalents Wall Chart free on request.

JOHN HASSALL, INC. 398 Oakland St. Brooklyn 22, N.Y.
Manufacturers of Cold-Headed Specialties—Established 1850

Mention Item NED-9250 when writing

The Foley Automatic Saw Filer sharpens all saws from 3 to 16 points per inch that can be filed with a 3-cornered file. This includes cross-cut circular saws up to 24" diameter, band saws ⅛" to 4½" wide, and all types of hand saws.

It is not possible for the human hand and eye to equal the machine accuracy of the Foley, which automatically joints the saw as it files, bringing all high, low, large, small and uneven teeth back to uniform size, shape, spacing.

You'll hardly recognize your old saws after the Foley has put them back in perfect condition—and our 30-DAY TRIAL OFFER permits you to see the results on your own work. Write or send coupon for details.

FOLEY *Automatic* SAW FILER

FOLEY MFG. CO. 3323 N. E. 5th St. Minneapolis 18, Minn.

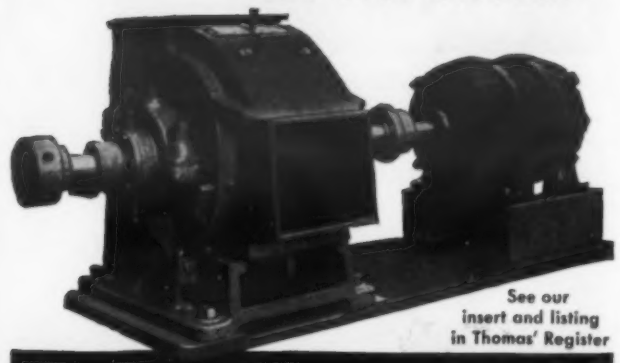
Please send literature, and details of your 30-DAY TRIAL OFFER.

Name .....

Address .....

Mention Item NED-9251 when writing

M & M HOGS FOR FASTER, LOW COST REDUCING



See our insert and listing in Thomas' Register

Throughout industry, M & M Hogs, Chippers, and Shredders lead in the economical reduction of waste and scrap. Whether you need a heavy-duty hog for processing packing house offal—a rubbish hog for reducing boxes, cartons and other combustible factory waste—or a veneer hog for converting sawmill waste into uniform chips, Mitts & Merrill make a superior model to meet your requirements. For swift, economical shredding of waste paper for packing, etc., the M & M "AIRFLUFF" Shredder is unexcelled. Write for complete information.

MITTS & MERRILL • SAGINAW, MICHIGAN

▲ Mention Item NED-9252 when writing ▲

Allen SOCKET special

- Engineered to meet special customer requirements.
- One of hundreds of specially designed precision socket screws in addition to more than

1500 STOCK SIZES AND TYPES OF

Allen socket cap and set screws, square head set screws, pipe plugs, dowel pins, shoulder screws, keys and drivers, the new Allenut*, and stainless steel socket cap and set screws.

SOLD ONLY THROUGH LEADING DISTRIBUTORS

Write direct for technical engineering information

WARNING

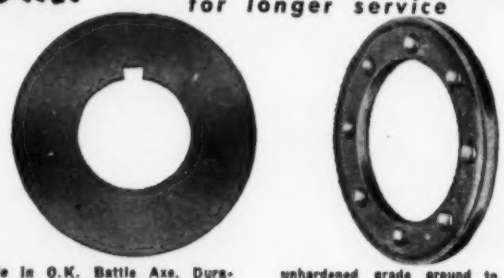
Allen-TYPE screws aren't necessarily Allen-MADE. Be sure to get genuine Allens in the black and silver box.

*Patent applied for

ALLEN MANUFACTURING CO. (ALLEN HEAD)
Hartford 2, Connecticut, U.S.A.
NEW YORK, CLEVELAND, DETROIT, CHICAGO, LOS ANGELES

▲ Mention Item NED-9253 when writing ▲

O.K. GANG SLITTER KNIVES for longer service



Made in O.K. Battle Axe, Dura-Chrome or Standard Carbon Grades. Precision ground to ±.0002 tolerances on thickness, diameter and bore. Extremely high finish. SPACERS for above in hardened or unhardened grade ground to same tolerances as Slitters. We make rotary cutters similar to the one shown for trimming sheet steel, light plates. Some are made with bevels for cutting paper, rubber, plastic, cloth, etc.

O.K. ROTARY SHEARS & BLADES for maximum toughness

The OHIO KNIFE Co.

CINCINNATI 23, OHIO, U. S. A.

CLIP AND MAIL TODAY

THE OHIO KNIFE CO., CINCINNATI 23, OHIO

Gentlemen: Please send without obligation specific data on knives I have checked.

☐ CIRCULAR KNIVES ☐ SHEAR BLADES

COMPANY_____

NAME_____

ADDRESS_____

▲ Mention Item NED-9254 when writing ▲

ACIDPROOF FILTER

All organisms or particles can be removed from any filterable liquid through use of this acidproof sheet filter. In addition, unit is flexible in use and facilitates clarification, sterilization or both in filtration of organic and inorganic acids. Active heads and piping are of stainless steel, and filter frames are molded from natural or synthetic hard rubber. When required, stainless steel parts can be constructed of any metal and coated with layer of acid-resistant synthetic materials. Made by **Hercules Filter Corp.**, 204-D 21st Ave., Paterson 3, N. J.

▲ Mention Item NED-9255 when writing ▲

TELESCOPIC LIFT TRUCK

Electrically operated Jack-Stacker telescopic lift truck is available in sizes having capacities up to 4000 pounds and is designed particularly for movement and high stacking of materials on skid platforms, on pallets or in sectional bins. Telescopic feature allows passage through doorways and under trusses or other overhead obstructions.

Counterweighted, straddle type, open-end base and platform type models are available for handling single or double-faced pallets as well as skids or platform type containers. All controls are operated from handle head with handle in any position. Truck has two speeds forward and reverse. Hydraulically operated lifting and lowering mechanism is used. Master drive unit, including traction mechanism, is mounted on articulated linkage to assure adequate traction over uneven surfaces, ramps and sills. Constantly applied type electric brake is released only by depressing handle triggers. Made by **Lewis-Shepard Products Inc.**, 302 Walnut St., Watertown 72, Mass.

▲ Mention Item NED-9256 when writing ▲

DO YOU KNOW?

■ ELECTRICAL current and pressure are combined in new Westin metal forming process to shape tubular sections. Process has many applications, and its use is claimed to result in considerable savings in time and materials. Applications include forming of steel gas cylinders, upsetting sections of tubing to increase wall thickness, sealing tube ends, necking-down tube sections and other production operations of a related nature on low-carbon or alloy steel, brass and other metals. Information available from Federal Machine & Welder Co., 212 Dana St., Warren, O.

▲ Mention Item NED-9257 when writing ▲

BEARINGS FOR ECONOMIZERS, BLOWERS AND INDUCED DRAFT FANS AVAILABLE IN OIL FILM, WATER COOLED TYPES.

sandy hill-cleveland type oil-film bearings

free of metallic friction

SHAFT FLOATS ON WEDGE-SHAPED OIL FILM

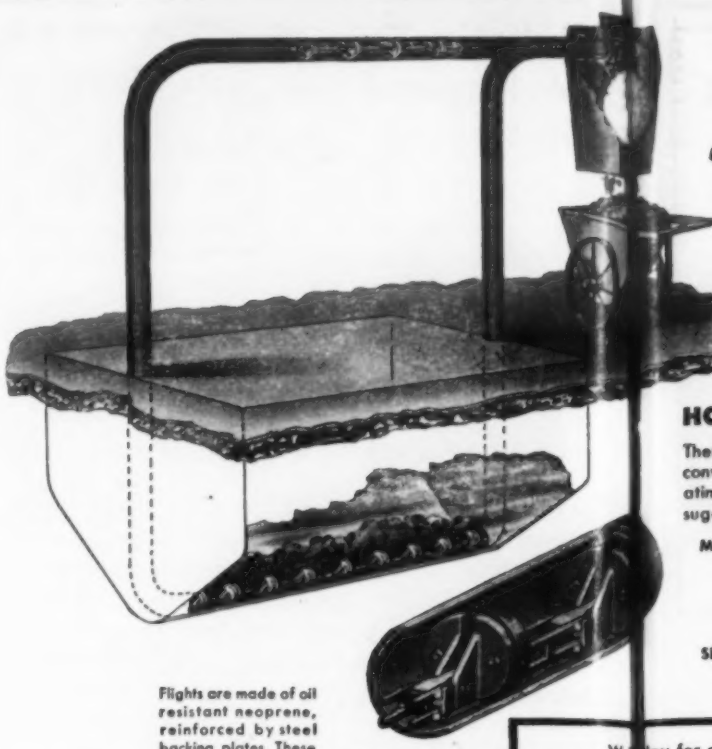
This bearing carries heavier loads, operates at higher speed, gives uninterrupted flow of power. Outdoes many ordinary bearings because it is friction-free and void of metallic contact. Bearing and shaft never touch! A flowing wedge-shaped film of oil forms a cushion on which the shaft floats free. Flow is always ample. Maintenance is minimized. Large capacity oil reservoir built in the bearing bottom seldom requires refilling.

Sandy Hill IRON & BRASS WORKS

PAPER MACHINERY SPECIALISTS • HUDSON FALLS, N. Y.

BUILDERS OF SANDY HILL, BERTRAMS AND KAMYR EQUIPMENT

▲ Mention Item NED-9258 when writing ▲



Flights are made of oil resistant neoprene, reinforced by steel backing plates. These travel through 2", 4" or 6" iron pipe and are pulled by a high torque gear transmission enclosed in an oil-tight gear case.

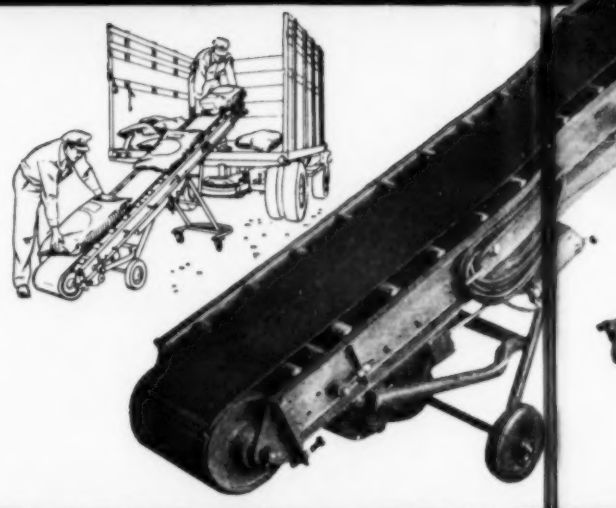
Write today for c
HONA CRAN
HOUDILLE

▲ Mention Item NE 9 when

MATHEWS

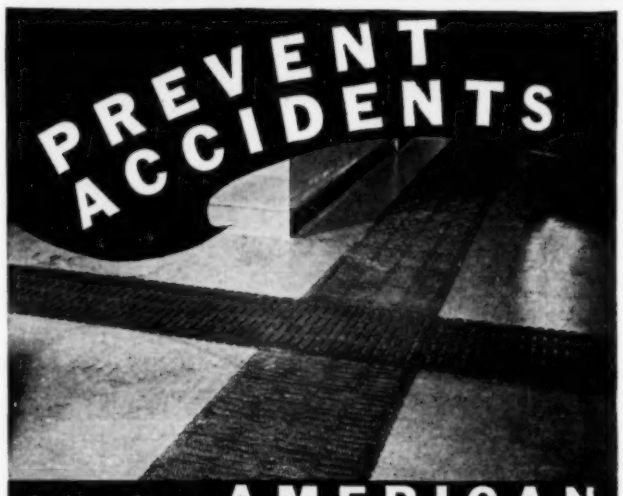
REVERSIBLE, PORTABLE BELT CO
10' LONG — 12" BELT WIDT

COMPLETE, READY TO OPERATE, WITH ALL NECESSARY ELECTRICAL EQUIPMENT



AVAILABLE ON A NATIONAL BASIS THROU

▲ Mention Item NE 9 when



by using AMERICAN COUNTER-TRED MATTING

A durable rubber and cord matting with a resilient non-slip surface for use in wet or slippery areas. Ridged bottom affords aeration and drainage. Easily handled for cleaning. Keeps the feet dry. ⅜" thick, 24" wide, any length.

—also—

AMERIFLEX HARDWOOD LINK MATTING
PERFORATED CORRUGATED MATTING
TUF-TRED TIRE FABRIC MATTING
NEO-CORD OIL AND GREASE RESISTANT COUNTER-TRED MATTING
EZY-RUG RUBBER LINK MATTING

For prices and folder, "A Mat for Every Purpose" for promoting safety and sanitation and reducing fatigue, write

AMERICAN MAT CORPORATION
"America's Largest Matting Specialists"
1733 ADAMS ST., TOLEDO 2, OHIO

▲ Mention Item NED-9261 when writing ▲

THE *New* Houdaille-e* CONVEYOR

Collects—Transports any type of solid or fibrous material that will settle to the bottom of a tank. It eliminates expensive, laborious time-consuming manual methods.

*Pronounced Hoo-dye

HOW CAN YOU USE THIS CONVEYOR?

There are hundreds of applications for this continuous automatic conveyor. It is already proved by installations that are operating in the metal working and other fields. Here are some suggested uses:

METAL WORKING (wet or dry): Metal Chips, Cast Iron Dust, Aluminum Oxide, Abrasive Sludge
SETTLING TANKS: Contamination, Scale
FOUNDRIES: Foundry Sands, Slag
PACKING PLANTS: Cracklings and Similar By-Products
FOOD PROCESSING
SOAP MFG.: Soaps
REFRACTORIES: Ceramic Powders, Aggregates, Refractory Materials, Cement
MANY OTHERS—Such as COAL, FLY ASH, Etc.

Write today for complete information. Engineering service is available.
DONALDSON CRANE CORP. 405 Wabash Avenue, Lebanon, Indiana
a subsidiary of
HOUDAILLE-HERSHEY CORPORATION

Mention NED-9263 when writing

ADJUSTABLE CUTTING TOOLS

Four heavy-duty styles have been added to standard line of Kennamatic line of adjustable cutting tools. Two tools, styles 3RK and 6RK, have cylindrical Kennametal inserts that are 1½ inches in diameter x 2¼ inches long. Inserts are held in 2 or 3-inch square steel shanks. These tools are intended primarily for machining cast iron.

Square insert tools, styles 11SK and 12SK, can have 1 x 1½-inch cutting insert in 2-inch square shank or 1¼ x 2-inch insert in 3-inch square shank. Made by **Kennametal Inc.**, 171 Lloyd Ave., Latrobe, Pa.

Mention Item NED-9263 when writing

THREE-WAY CABINET LOCK

Incorporating a rotating cylinder, this three-way lock can be adapted to use as drawer lock with bolt moving vertically or as cabinet or cupboard lock for either right or left hand doors, with bolt moving horizontally. Cylinder is rotated by first releasing small catch on housing, and then cylinder can be turned with fingernail, pin or small screwdriver. Lock is of pin-tumbler type and is made of solid brass with variety of finishes. It is produced with both deadbolts and springbolts. Made by **Yale & Towne Mfg. Co.**, 211 Henry St., Stamford, Conn.

Mention Item NED-9264 when writing

HIGH TEMPERATURE MOTORS

Compact size and lightness in weight are features of line of high temperature Life-Line totally-enclosed nonventilated induction motors. Particularly suitable for use where space is at premium, these motors have silicone insulated windings and silicone grease for bearing lubrication. Efficiency, torque and power factor are comparable with those of same size open motors. High temperature motors are as much as three frame sizes smaller than standard class A insulated totally-enclosed motors of same output. Illustration shows comparative sizes of 5-horsepower class A insulated motor in 326 frame (right) and 5-horsepower silicone insulated motor in 254 frame (left). Made by **Westinghouse Electric Corp.**, P.O. Box 868, Pittsburgh 30, Pa.

Mention Item NED-9265 when writing

SEAL PIPE JOINTS *With* KEY-TITE

Stop Needless Waste

Pipe joints sealed with Key-Tite cannot leak. Key-Tite is a perfect seal on all lines carrying water, gas, low-pressure steam, compressed air, etc. It contains no lead or substitutes and does not affect the taste or odor of potable liquids. Joints are easily opened, too, for it will not freeze in the joint. Stop losing money through leaky pipe joints . . . seal with Key-Tite.

KEY COMPANY
2601 McCasland Ave., East St. Louis, Ill.
KEY Company

Mention Item NED-9267 when writing

SLY BLAST CABINETS
for cleaning by sand or grit blast
for surface-peening by shot blast

Hundreds of these cabinets are used on tools, forgings, castings, heat treated parts and other miscellaneous work for cleaning or surface-peening.

Two light fixtures provide ample illumination inside of the blasting chamber. A vision screen affords full view of the interior of the cabinet, and the large hood excludes all outside glare. A heavy grating forms the work floor in the blasting chamber. The cabinet is of steel plate, welded construction on a rigid angle frame.

CABINETS OF SPECIAL DESIGN TO SUIT INDIVIDUAL APPLICATIONS

Type "A" Cabinet with slotted rubber curtain on front through which blast gun is inserted and manipulated. Work remains stationary. Several other sizes and styles. Write us giving details of your cleaning or surface-peening problems.

THE W. W. SLY MFG. CO.
4748 Train Ave. • Cleveland 2, Ohio
SLY

Mention Item NED-9268 when writing

EVS
BELT CONVEYER
BELT WIDTH
TE, WITH ALL
QUIPMENT

WRITE TODAY FOR COMPLETE INFORMATION

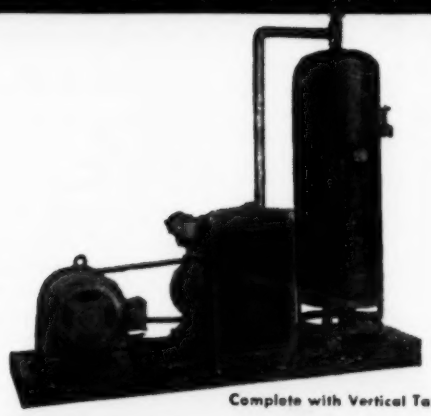
SAFELY, EASILY ADJUSTABLE by ONE PERSON

MATHEWS CONVEYER COMPANY
ELLWOOD CITY, PENNA.
PORT HOPE, ONTARIO
SAN CARLOS, CALIFORNIA

IS THROUGH AUTHORIZED DISTRIBUTORS

Mention NED-9 when writing

SCHRAMM AIR COMPRESSORS



Complete with Vertical Tank

Schramm Compressor with vertical air receiver consists of a "V" Belt Drive and is mounted complete with air tank and cooling unit on base ready for installation. No costly foundations or special locations are necessary. This combination is built in sizes ranging from 50 to 600 cu. ft. displacement.

SCHRAMM INC. THE COMPRESSOR PEOPLE WEST CHESTER PENNSYLVANIA

Mention Item NED-9262 when writing

DRAFT GAGES

. . . that are
MECHANICALLY SIMPLE—
lastingly accurate

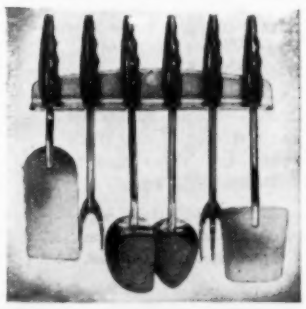
The fine accuracy, durability and dependability of Hays Draft Gages stem from the unique colon leather diaphragm. Remarkably tough, yet soft and pliable, it withstands constant flexing, lasts indefinitely, maintains extreme sensitivity and accuracy and is unaffected by sudden overloads. Complete range of sizes for every need. Write for Bulletin 47-667.

The HAYS CORPORATION
COMBUSTION & INDUSTRIAL INSTRUMENTS & CONTROLS
MICHIGAN CITY, INDIANA, U.S.A.

Mention Item NED-9266 when writing

A PRIZE-WINNING RECIPE FOR JOINING *Stainless steel* EASY-FLO

the low temperature silver brazing alloy—is the basic ingredient. Take EASY-FLO in wire ring, washer or strip form as required—assemble cleaned parts with EASY-FLO preplaced at joints—apply Handy Flux—use a fast heating method such as oxyacetylene torch, furnace, induction or gas-air burners—that's the prize-winning recipe. And the PRIZE is *fast, trouble-free, low-cost production.* It's the recipe that put new speed and profit in producing the popular stainless steel kitchen utensils below.



A WINNER ON OTHER METALS TOO

EASY-FLO 45 joins all metals that have melting points above its low working temperature of 1145° F. For joining dissimilar metals you can't beat it. We offer full cooperation in adopting the EASY-FLO recipe to your production. Get full EASY-FLO details in BULLETINS 12-A and 15. Write for them today.

HANDY & HARMAN 82 Fulton St., New York 7, N. Y.
Agents in Principal Cities. In Canada: HANDY & HARMAN of Canada, Ltd., Toronto

Mention Item NED-9269 when writing

The reason why prominent oil burner manufacturers, as well as other users of electric motors, specify and use motors with built-in Klixon Protectors is because these protectors prevent motors from overheating and burning out.

Built-in by the motor manufacturer, Klixon Protectors stand guard ready to cut-off the power should an overload or short occur.

Remember, too, Klixon Protectors keep other equipment, such as transformers, solenoids, and adjustable voltage transformers from overheating and burning out. Specify that motors and other electrical equipment have built-in Klixon Protectors.

SPENCER THERMOSTAT CO.
1912 Forest St., Attleboro, Mass.
KLIXON

▲ Mention Item NED-9270 when writing ▲

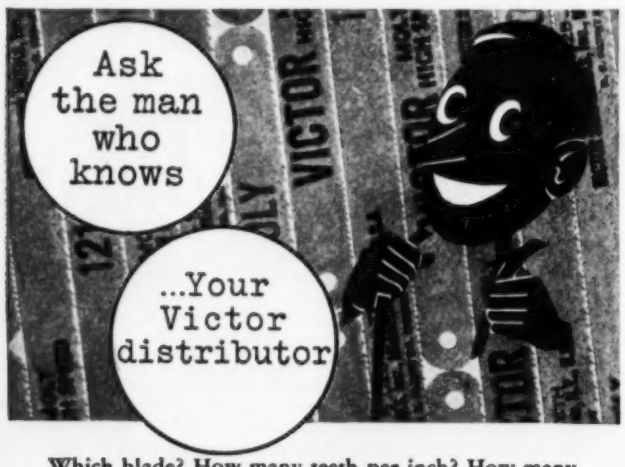
Speed Up Industrial Waste Disposal

● Remove industrial waste fast with Koehring 205. A reliable high production unit in a small package, the Koehring 205 is the ideal excavator for the industrial plant. Half-yard shovel capacity: 13,800 lbs. lifting capacity (75% rating). Easily convertible from shovel to lift crane, pull shovel, or dragline. Contact your Koehring distributor today.

778

KOEHRING 205
KOEHRING COMPANY, Milwaukee 10, Wis.

▲ Mention Item NED-9271 when writing ▲



Which blade? How many teeth per inch? How many strokes per minute?

These and other questions puzzle many a hack saw user. If they puzzle you, see your Victor distributor. He has the experience and knowledge to show you how to cut metals and plastics faster, easier and better... how to choose the right blade for various materials ...how to get the most from each stroke of the hack saw. Yes, a little advice from the Man Who Knows will save you time and money in the long run.

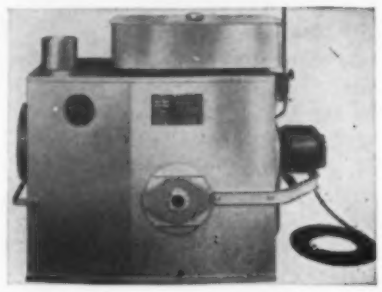
Ask your distributor for free copies of "Metal Cutting" and the famous Victor Wall Chart containing helpful hints on the selection, care and use of hack saw equipment.

VICTOR SAW WORKS, INC.
Middletown • N. Y.

MAKERS OF HAND AND POWER HACK SAW BLADES, FRAMES AND METAL CUTTING BAND SAW BLADES.

▲ Mention Item NED-9272 when writing ▲

PORTABLE SPACE HEATER



Oil burning, electric powered Economy model portable heating unit utilizes one 12-inch diameter x 12-foot long collapsible canvas duct to provide on-the-spot heat for drying, thawing, preheating or space heating requirements. It has output of 125,000 British thermal units per hour and utilizes prime white distillate as fuel. Heater provides complete separation of products of combustion from ventilating air stream. Made by **Herman Nelson Corp.**, Moline, Ill.

▲ Mention Item NED-9273 when writing ▲

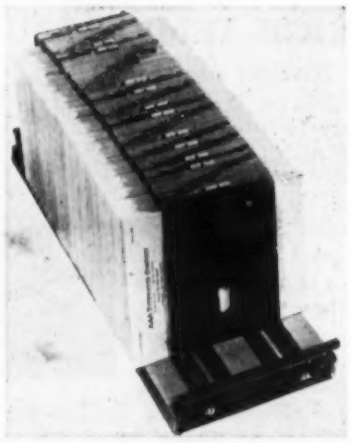
ALUMINUM SCREW CLAMPS

Line of aluminum alloy Cee-Type screw clamps now includes three models. No. 350 heavy duty deep thoat frame pattern with I-beam design and double Acme thread is especially suited for deep work requiring heavy pressures. It is available in sizes with 4, 6, 8 and 10-inch work opening. Model No. 325 clamp has sliding bar, Sure-Grip handle and is available in sizes with 3 to 12-inch work openings. Light duty No. 300 clamp is available in 2½ to 6-inch sizes.

Aluminum alloy clamps are especially desirable for welding work because they have minimum adhesion to welding flash. In addition, they are nonmagnetic and will not spark, corrode or rust. Made by **Foster Aluminum Alloy Products Corp.**, 114-118 S. Salina St., Syracuse 2, N. Y.

▲ Mention Item NED-9274 when writing ▲

VERTICAL SORTING DEVICE



Vertical, direct-reading Sort-O-Mat paper sorter holds papers on edge to eliminate waste space. Alphabetic sorting is done at one time to first two letters of each name. This is generally sufficient except where large volume sorting is done, in which case papers are run through second time and sorted to fourth letter. Other guiding provides subjective, numeric, geographic or special sort.

At beginning of each sort, all guides and dividers are slipped toward back of sorter. As guides are rocked forward to receive sheets of paper, they automatically creep and open to amount of space necessary to accommodate media field. Round sight-check hole helps during stripping operation and provides check throughout sorter for missing papers. Made by **Yawman & Erbe Mfg. Co.**, P. O. Box 880, Rochester 3, N. Y.

▲ Mention Item NED-9275 when writing ▲

This NEW 1248 Magnetic Counter

is easier to BUILD-IN as an original product-part

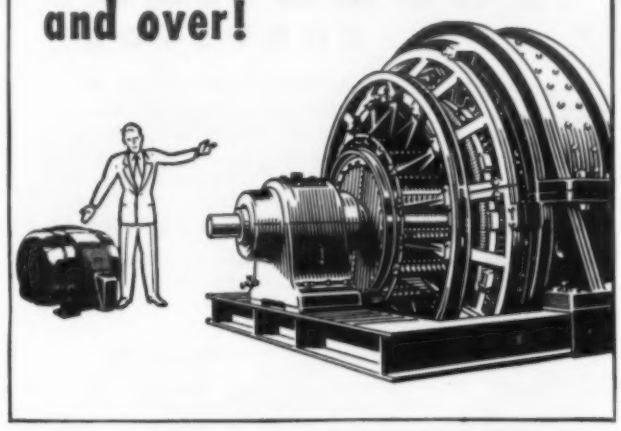
Here's a magnetic counter of smaller size ... with a compact, streamlined, 2-tone case that adapts itself more easily to built-in installations. A magnetic counter that affords the utmost in durability and accuracy because it has fewer working parts. A magnetic counter especially adapted to remote-indication from plant to office.

The New Series 1248 Magnetic Reset Counter features the Veeder-Root "Ease-Eye" Direct-Reading Line of 6 large figures, in large windows, brought out boldly by the contrasting background of a band of light gray ... *making direct reading easy,* at some distance. What's more, it features higher accuracy, faster operation, and more counts-per-minute.

VEEDER-ROOT INC., HARTFORD 2, CONNECTICUT

▲ Mention Item NED-9276 when writing ▲

"Headquarters" for Motors ½ to 25,000 hp. and over!



DO YOU NEED standard, open squirrel-cage motors between 1 and 200 hp? Contact your Allis-Chalmers *dealer* or *district office.* Either can probably supply you from stock now. For motors 250 hp and up, call your Allis-Chalmers *field engineer.* He's an *expert* . . . can help you solve problems involving big *or* small motors. All A-C dealers and district offices have up-to-the-minute motor delivery data available. Get Bulletin 51B6052H.

ALLIS-CHALMERS
MILWAUKEE 1, WISCONSIN A 2424

▲ Mention Item NED-9277 when writing ▲

Make it *easy* for your workers to move materials—and you take a big step toward lower handling costs. That's one of the reasons why it pays to use boxes, cans and other receptacles made from *Diamond Fibre.* This durable material weighs only ½ as much as aluminum—yet is plenty strong for long, hard use! It will not readily crack, splinter, or shatter. Its smooth, tough finish makes it safe for handling anything from fine fabrics—to steel products. For faster, *easier* materials handling, write for Catalog HW-46, today.

C-D DIAMOND FIBRE HOLLOW WARE
CONTINENTAL-DIAMOND FIBRE CO., NEWARK 30, DEL.

▲ Mention Item NED-9278 when writing ▲

EYE LEVEL CHECK ON BOILER WATER LEVELS

Positive, constant check on boiler water levels is now possible at eye level—right on the instrument panel or other convenient location.

Yarway's Remote Liquid Level Indicator is always accurate because it's operated by the boiler water itself. No stuffing boxes. Indicating mechanism is never under pressure.

Ideal for indicating boiler water level, feed heater water level, superheater pressure differentials and tank levels. For complete description and operating details, write for Bulletin WG-1822.

YARNALL-WARING COMPANY
131 Mermaid Ave., Philadelphia 18, Pa.

YARWAY
REMOTE LIQUID LEVEL INDICATOR

▲ Mention Item NED-9279 when writing ▲

simplicity

PAYS RETURNS!

No "bugs" for you in this component! The utter simplicity of Gast Rotary Design pays off — in trouble-free performance — in lower manufacturing costs — in ready adaptability to your product application. Every Gast Air Motor, Air Compressor, and Vacuum Pump uses this simple sliding-vane rotary principle. If you can use low-capacity air equipment, consider all the advantages offered by Gast units. We will gladly cooperate with engineering help. For details, write us, describing your problem. Request your copy of our Idea-Catalog.

AIR MOTORS TO 1 H. P. AIR COMPRESSORS TO 30 LBS.
VACUUM PUMPS TO 28 IN.

GAST ROTARY AIR MOTORS COMPRESSORS VACUUM PUMPS

GAST MANUFACTURING CORP.
115 Kinkley Street, Benton Harbor, Michigan

▲ Mention Item **NED-9280** when writing ▲

AW SUPER-DIAMOND FLOOR PLATE

GIVES YOU THE EXTRAS AT NO EXTRA COST

You get maximum safety in AW Super-Diamond Floor Plate because, wet or dry the exclusive pattern grips without a slip. It's easy to clean and easy to match. It has over 1001 uses in plants and on products.

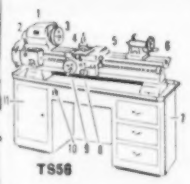
EXTRA Safety!
EXTRA Economy!
EXTRA Service!

FREE—Write for our 16 page catalog L-35

AW SUPER-DIAMOND
FLOOR PLATES THAT GRIP

A Product of ALAN WOOD STEEL COMPANY
Conshohocken, Pa.

▲ Mention Item **NED-9281** when writing ▲



1. Zero Precision Taper Roller Bearings—most accurate made.
2. 1⅜" hole thru spindle—1" collet capacity.
3. 11¼" Swing.
4. Spindle run out accuracy within .0005.
5. Heavier carriage, wider bearing on bed.
6. 56" Bed held within .0005" of parallel alignment.
7. Reinforced steel cabinet bench with plate top.
8. Large double wall apron.
9. Standard big lathe controls.
10. Front Switch.
11. 8-speed, v-belt, enclosed underneath motor drive.

The more you compare

Unless you have kept up-to-the-minute on the post-war developments in the new lighter, less inexpensive lathe field, you will be surprised at the tremendous advances in accuracy, capacity, speed, stamina and *earning power* that have been made in this field.

You will also find, that the more you compare these new lathes, the more you will determine on

SHELDON

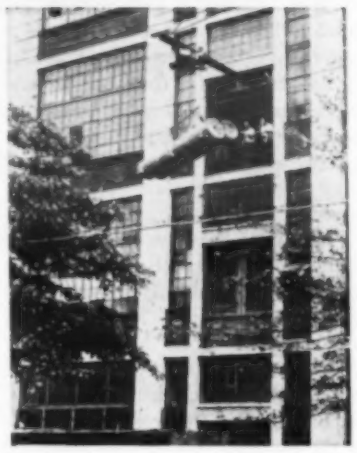
One of the New Sheldon big little lathes

WRITE FOR NEW G-48 CATALOG

SHELDON MACHINE CO. Inc.
Manufacturers of Sheldon Precision Lathes • Milling Machines • Shapers
4215 N. KNOX AVENUE • CHICAGO 41, ILLINOIS, U.S.A.

▲ Mention Item **NED-9282** when writing ▲

OVER-YARD HOIST



Electric trolley-hoist mounted on third-story I-beam extending out over plant yard eliminates manual lifting and lowering of raw materials, machinery and outgoing products at large rug plant. In addition, installation frees elevators for other duties. Hoist picks up rugs inside plant, carries them through open door and lowers them to street trucks. Long electric control cable permits raising and lowering by pushbutton control when hoist is at far end of beam. Hoist made by **Yale & Towne Mfg. Co.**, 4537 Tacony St., Philadelphia 24, Pa.

▲ Mention Item **NED-9283** when writing ▲

DRY GRINDING BELT

Utilizing special heat-resistant thermosetting resin adhesives, Resinall Metalite dry grinding belt makes possible high production rate and long life on high-heat-generating operations. Belt is reported to remain sharp longer than those employing conventional glue type adhesives. Made by **Behr-Manning Corp.**, Troy, N. Y.

▲ Mention Item **NED-9284** when writing ▲

LABORATORY TYPE SHAKER

Available in models with four different power units having various speed characteristics, this laboratory type shaker can also be fitted with any one of three different styles of carriers.

Utility box type carrier illustrated is equipped with sliding bar clamp to hold various sizes and shapes of objects. Units can have single-speed operation at 280 excursions per minute, single-speed operation at 160 excursions per minute, two-speed operation of 280 and 160 excursions per minute or variable speed for operation at from 100 to 300 excursions per minute.

Shakers equipped with flask carriers will hold fifteen 250-milliliter flasks or twelve 500-milliliter flasks. Vertical rods attached to box carrier and equipped with laboratory type clamps will hold special containers. Power unit is finished with black wrinkle and is mounted on rubber suction cup feet to dampen vibration and minimize creeping. Made by **Eberbach & Son Co.**, P.O. Box 63-G, Ann Arbor, Mich.

▲ Mention Item **NED-9285** when writing ▲

Increase Production of Fines by 300% with

STURTEVANT CENTRIFUGAL AIR SEPARATORS

Accurate Separation of Fines from 40 to 325 Mesh and Finer . . .
Output Capacity from ¼ to 50 Tons Per Hour

Records prove that Sturtevant Air Separators cut separation costs of various materials by as much as 300%. In addition, they provide additional economies by reducing power costs up to 50%. That's why you'll find hundreds of these separators in all types of industries. Ruggedly constructed of quality materials, Sturtevant Air Separators keep on working day after day with minimum maintenance. They are available in many sizes from ¼ to 50 tons per hour output.

Investigate cost-cutting Sturtevant Air Separators for your plant. Write for catalog and information, today.

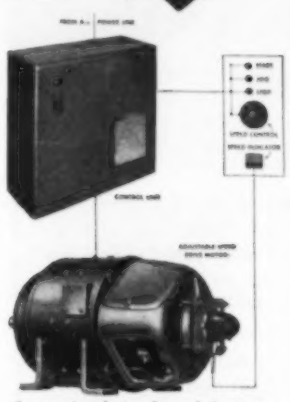
STURTEVANT MILL COMPANY
114 CLAYTON STREET, BOSTON 22, MASS.

Designers and Manufacturers of
CRUSHERS • GRINDERS • SEPARATORS • CONVEYORS
MECHANICAL DENS and EXCAVATORS • ELEVATORS • MIXERS

▲ Mention Item **NED-9286** when writing ▲

RELIANCE V★S DRIVE

Proved . . . in Industry after Industry!



Conveniently-packaged, factory-wired V★S Drives are available from 1 to 200 hp. Two or more motors may be operated simultaneously from a single Control Unit.

Today, thousands and thousands of Reliance V★S Drives, providing *adjustable speeds from A-c. circuits*, are helping to increase production and reduce costs in every industry. These completely packaged, all-electric drives have become so popular since they were first introduced ten years ago that there is now no important industry where they are not being profitably employed. If you do not yet have the proved time-saving and cost-cutting advantages of Reliance V★S Drive in your plant, it will pay you to investigate further. Write for *new* Bulletin 311!

RELIANCE ELECTRIC & ENGINEERING COMPANY
1082 IVANHOE ROAD • CLEVELAND 10, OHIO

Sales Offices in Principal Cities

▲ Mention Item **NED-9287** when writing ▲

Plugged Tubes mean nothing to this new drill!

airetool's new CB drill for heat exchanger and condenser tubes ⅜" to 2½" I.D.

This drill head — one of many Airetool designs — features a carbide metal tip that cleans the hardest scale even when tubes are completely plugged. Try it with Airetool's direct-drive or geared cleaners and you'll have a perfect cleaning job faster and at less cost.

don't retube—clean it!

The illustrations to the left show a ⅝" tube before and after cleaning. See how thoroughly the plugged tube was cleaned — making retubing unnecessary.

For further information write,
The Airetool Mfg. Co., 308 S. Center Street
Springfield, Ohio

THERE'S AN AIRETOOL TUBE CLEANER AND EXPANDER FOR EVERY TYPE OF TUBULAR CONSTRUCTION.

AIRETOOL
MANUFACTURING COMPANY
SPRINGFIELD, OHIO

▲ Mention Item **NED-9288** when writing ▲

Experienced shop men say—

"It's NI-ROD

for machinable welds in cast iron!"

Machinists like NI-ROD because it makes sound, non-porous welds that machine as readily as cast iron itself. No extra-hard tools or special techniques needed. No valuable shop time lost through fancy set-ups and frequent tool replacements.

Welders like NI-ROD because it is free-flowing, stable-arcing on AC or DC, and fuses well with all grades of cast iron. Preheating and post-heating are seldom required.

Your nearest INCO distributor stocks NI-ROD in 3/32", 1/8", 5/32" and 3/16" sizes. Order a package today and your shop men, too, will agree: *"It's NI-ROD for fast, sound, machinable welds in cast iron."*

Send for your copy of the valuable new free booklet, *"NI-ROD . . . a new electrode for any cast iron welding."*

New Free Booklet

THE INTERNATIONAL NICKEL COMPANY, INC.
69 Wall Street, New York 5, N. Y.

Mention Item NED-9289 when writing

PARTS FINISHING MACHINE

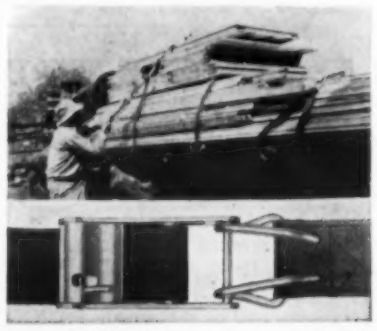
Wet abrasive blast cleaning and finishing of metal surfaces is performed efficiently by this Jet Blast Machine. Rust, scale and undesirable metal particles such as feather-edges are removed by projecting high pressure blast of fine abrasive suspended in water against surface to be cleaned.

Because abrasive from 60 to 1250 mesh can be used, it becomes commercially possible to produce finishes as low as 2 to 3 micro-inches root mean square. Jet Blast method produces matte finish with practically no removal of metal. Process is particularly suitable for preparation of metal parts for plating, painting or enameling.

Standard machines consist of 30 x 30 x 77-inch cabinet; one blast nozzle and exhaust blower direct-connected to ¼-horsepower motor; and 48 x 42 x 108-inch cabinet, illustrated, with one to eight blast nozzles and exhaust blower driven by 1-horsepower motor. Siphon jet principle is employed to transfer abrasive grit slurry and project it against work. Completely self-contained, unit is connected to shop compressed air lines and electric power source to drive blower. Made by **Armstrong Chemical & Machine Co.**, Painesville, O.

Mention Item NED-9292 when writing

CARGO-LOCKING STRAP



Equipped with type III heavy-duty webbing in any required length and necessary end fittings, Load-Set WebLock provides economical means for safely securing cargoes in transit. It can be used to fasten loads of boards, pipe, crates and furniture as well as other items for long or short distance hauling. Providing operator with mechanical advantage of 2:1, it can be pulled easily to desired tension and eliminates slackening or backlash. Since precise adjustment of tension can be obtained, delicate loads are not damaged. Made by **Pacific Airmotive Corp.**, Dept. NE, 2940 N. Hollywood Way, Burbank, Calif.

Mention Item NED-9293 when writing

DO YOU KNOW?

■ KRYPTON, a rare atmospheric gas, is now utilized to provide newly developed 25-watt fluorescent light source with 50 per cent more efficiency than present 20-watt lamp. In addition, this rare gas provides for 15 per cent savings in current costs for same amount of light, longer lamp life, lower starting voltages and elimination for need of transformers. Manufactured in 1½-inch diameter x 33-inch long size, lamps will be available first in white and in colors at later date. Made by Duro Test Corp., Dept. 15, North Bergen, N. J.

Mention Item NED-9294 when writing

BRAND NEW!

Actually 2 Switches in 1 Compact Housing!

Weight: 1¾ lbs.
Dimensions: 8½" long 3½" wide 2" high
WRITE FOR FOLDER
Let us quote on your special switch requirements

LINEMASTER DUPLEX FOOT TREADLE SWITCH

Each switch can be wired to operate as single pole, normally open; single pole, normally closed; or single pole, double throw. Center is neutral position. Pressure with toe or heel selects either of 2 loads. Motor may be turned on with toe, shut off by releasing toe, reversed with heel. Slight pressure establishes immediate contact. Neat, streamlined, cast aluminum housing with black crackle finish.

Sales Agents: Some territories still available

SIMONDS MACHINE CO., Inc.
33 VIKING TERRACE • SOUTHBRIDGE, MASS.

Mention Item NED-9296 when writing

Say Goodbye to Taps!

THIS FREE TEST KIT SHOWS HOW TO ELIMINATE TAPPING COSTS!

SHAKEPROOF THREAD-CUTTING SCREWS . . . actually cut their own snug, perfectly mated threads in metal. The exclusive Shakeproof shank slot provides true tapping action as each screw is driven into an *untapped* hole . . . they tap and fasten in one operation! Shakeproof Type 1 Thread-Cutting Screws mean faster assembly and lower production costs!

WRITE FOR FREE TEST KIT TODAY!
Request Kit No. 22 for metal applications.
Request Kit No. 10 for plastic or die cast applications.

SHAKEPROOF inc.
"Fastening Headquarters"
DIVISION OF ILLINOIS TOOL WORKS
2501 North Keeler Avenue, Chicago 39, Illinois

Mention Item NED-9290 when writing

Eliminate "DEAD" Storage Space . . . Speed Up Handling with FARQUHAR FLEXIMOUNT CONVEYORS

FARQUHAR Fleximount (Model 435 FM shown here) Freight Conveyors move bags, bales, boxes, cartons, and bundles *faster, cheaper, easier* when your handling operations call for loading, piling, stacking or moving from floor to floor.

Handy, flexible, Farquhar Fleximount, with quick-acting hydraulic center lift, teams up with horizontal and gravity conveyors to make good use of "dead" storage space—speeds up and smooths out your handling operations. Designed for handling units up to 150 lbs. each. Available in two boom sizes and with a variety of attachments and mountings, depending upon your requirements.

For complete information on the right Farquhar materials handling Conveyor for your use, write:

A. B. Farquhar Company, 204 Duke Street, York, Pa., or 620 W. Elm St. Chicago 10, Illinois, or Portable Machinery Sales, 803 Broadview Ave. Toronto, Ontario.

Farquhar
Portable or Permanent Materials Handling
CONVEYORS

HYDRAULIC PRESSES • FARM EQUIPMENT • FOOD PROCESSING MACHINERY • SPECIAL MACHINERY

Mention Item NED-9297 when writing

INDUCTROLS

TURN THE CRANK and get stepless voltage control for

Calibrating Instruments—provides adjustable voltage for checking a-c instruments against a standard.
Rectifier Control—permits control of d-c output by varying a-c voltage to plate transformer.
Heat Control—can be used to effectively control heat output of small a-c furnaces, welders, etc.
Dielectric Testing—used in supply circuit of transformer, permits smooth raising of test voltage.
Illumination Control—for theater dimming, photo and blueprinting, offers smooth control of lights.
Speed Control—provides efficient way of smoothly varying speed of voltage-sensitive a-c motors.

G-E Inductrols are small, 120/240-volt, dry-type induction voltage regulators, for industrial and electronic applications requiring a source of smoothly variable voltage or current. One design provides a voltage range of 10% raise and lower in 3- and 6-kva circuits. Another provides a range of 100% raise and lower with output ratings of 2.4- and 3.6-kva at maximum voltage.

Bulletin GEA-4508 gives full information on hand-operated and automatic Inductrols. Address *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

GENERAL ELECTRIC

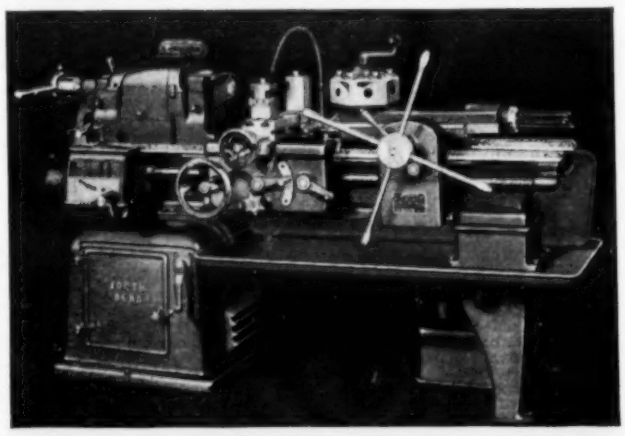
Mention Item NED-9291 when writing

SOUTH BEND 2-H TURRET LATHE

for Fast, Precision Machining

Its speed, accuracy and ease of handling enables the 2-H Precision Turret Lathe to lower production costs of precision parts. It is especially suited for second operations. Write for Catalog 67-F.

1" Collet Capacity . . . 1-3/8" Spindle Bore . . . 16-1/4" Swing . . . 28-1/4" Turret to Spindle . . . 12 Spindle Speeds . . . 48 Thread Cutting and Carriage Power Longitudinal and Cross-feeds . . . 96 Turret Power Feeds



MODEL 2-H PRECISION TURRET LATHE—6 foot bed with motor control; 2-speed, 3-phase, A.C. motor; and oil pan. Less handlever collet attachment, coolant pump assembly, and splash pan — f. o. b. factory $2702.80

SOUTH BEND LATHE WORKS
Building Better Tools Since 1906 • 443 E. Madison St., South Bend 22, Ind.

Mention Item NED-9295 when writing

CANNON PLUGS

GB-3-34CD5 Receptacle

For a copy of the new Battery Bulletin, Third Edition, address Dept. L-113.

New Battery Bulletin

for ENGINE Starting Equipment

● Cannon Electric Battery Connectors save thousands of dollars every year for the oil industry with the above connector used for starting pumping engines, which eliminates the need for a battery and generator *on each engine*, and permits servicing of many engines from *one service truck.*

Can this or other battery connectors save your business money? Investigate first by sending for GB-64 Battery Bulletin.

SINCE 1915
CANNON ELECTRIC
Development Company
3209 HUMBOLDT ST., LOS ANGELES 31, CALIF.

Mention Item NED-9298 when writing

SPEED PRODUCTION with Quick Acting JOHNSON Furnaces

TURN THE HEAT ON HIGH SPEED STEELS

CUT WASTED TIME WITH JOHNSON NO. 130A HI-SPEED

Heat treat high speed steels, dies and tools at LOW COST

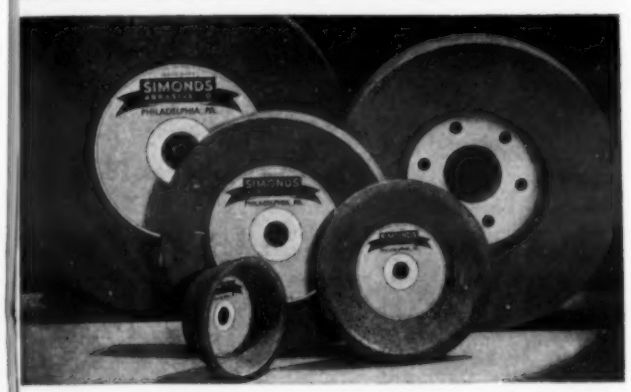
This Quick Acting JOHNSON Furnace is available in two temperature ranges. 4-Burner unit for steels requiring 1400 - 2350° F., and the 6-Burner for 1800 - 2400° F. Powerful burners fire under hearth to produce high uniform heat quickly. Save time and gas. Counterbalanced door opens upwards. Firebox 7 x 13 x 16½. Complete with Carbofrax Hearth, G. E. Motor and Johnson Blower.

FREE CATALOG

4-BURNER $295.00
6-BURNER $325.00
F.O.B. Factory

JOHNSON GAS APPLIANCE CO.
591 E AVENUE N. W. CEDAR RAPIDS, IOWA

Mention Item NED-9299 when writing



BEST for Carbide Tools

SIMONDS ABRASIVE CO.

Electrolon GRINDING WHEELS

SIMONDS ABRASIVE COMPANY is a division of SIMONDS SAW & STEEL CO.
Other divisions: Simonds Steel Mill; Simonds Canada Saw Co., Ltd. Simonds Canada Abrasive Co., Ltd.

Specially developed to prolong the efficiency of cemented carbide tools with economical grinding cost. Accepted as a standard of excellence throughout industry. All sizes and shapes available through your nearest Simonds Abrasive Distributor. Write for his name and address, also request new Bulletin ESA 181, about wheels for cemented carbides.

SIMONDS ABRASIVE CO., 5514 TACONY ST., PHILA. 37, PA.
DISTRIBUTORS IN ALL PRINCIPAL CITIES

Mention Item NED-9300 when writing

Get the Performance Facts on this ADVANCED Resistor

Present performance standards for fixed insulated composition resistors have been obsoleted by this new IRC resistor . . . the ADVANCED Type BT at ⅓, ½, 1 and 2 watts.

Standards of performance set by this new resistor are so advanced, you need complete information on its characteristics. Write for Technical Bulletin B-1 on your letterhead.

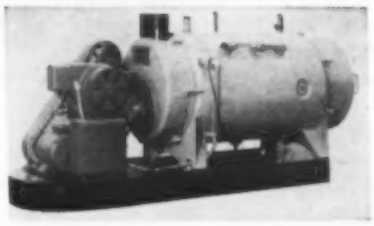
IRC

power resistors • precisions • insulated composition resistors • low wattage wire wounds • rheostats • controls • voltmeter multipliers • voltage dividers • HF and high voltage resistors

INTERNATIONAL RESISTANCE COMPANY
401 N. Broad St., Philadelphia 8, Pa.
In Canada: International Resistance Company, Ltd., Toronto, Licensee

Mention Item NED-9301 when writing

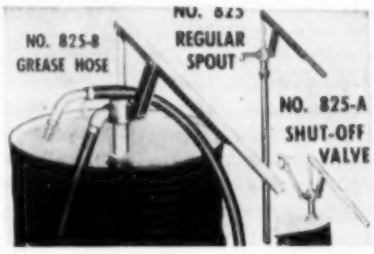
HOT WATER GENERATOR



Available in oil or gas-fired models, industrial type automatic hot water generator can be supplied with output of 550,000 British thermal units or 665 gallons per hour at 100° F temperature rise; or output of 730,000 British thermal units or 875 gallons per hour at 100° F rise. High efficiency is provided by four-pass construction of generator shell which is galvanized and covered with thick insulation jacket. Hinged rear door provides access for cleaning and maintenance. Exhaust gases are carried away by means of vent, and use of forced draft burner eliminates need for draft hood. Units are equipped with industrial type safety controls and conform to A.S.M.E. code. Made by **Cleaver-Brooks Co.**, Dept. NED, 326 E. Keefe Ave., Milwaukee 12, Wis.

Mention Item NED-9302 when writing

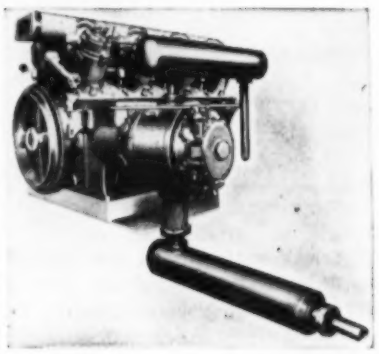
DRUM PUMP



Spider design of piston and intake opening of this drum pump provides cut-through action and large capacity that handles any fluid which seeks its own level with exception of lacquer thinners. Heavy greases are pumped at rates up to 3 gallons per minute, and alcohol and other light fluids are handled more rapidly. Air pressure maintains smooth flow and eliminates splashing and waste. To install, pump is simply screwed into drum bung. Bung bushing fits both 2 and 1½-inch barrel openings on 15, 30 and 60-gallon drums. Pump is available with regular spout, with shut-off valve, or equipped with 8-foot grease hose. Made by **General Scientific Equipment Co.**, 2701 W. Huntingdon St., Philadelphia 32, Pa.

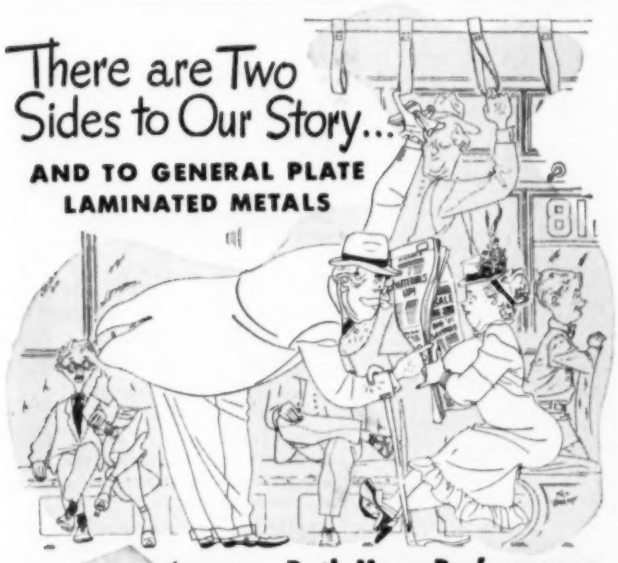
Mention Item NED-9303 when writing

PULSATION DAMPENER



Designed for installation on suction or discharge sides of compressors to eliminate excessive vibration caused by pulsative flow through gas, air or vapor lines, this Fluor pulsation dampening device reduces maintenance costs to minimum. Units are constructed on filter principle and fabricated to meet individual installation needs. In addition to protecting equipment served, dampeners minimize floor vibration, crystallization and subsequent pipeline breakage. Made by **Benson & Associates, Inc.**, NED Rm 813, 536 S. Clark St., Chicago 5, Ill.

Mention Item NED-9304 when writing



There are Two Sides to Our Story...
AND TO GENERAL PLATE LAMINATED METALS

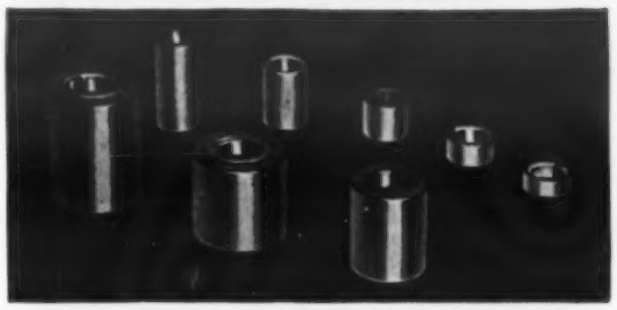
Both Mean Performance and Economy To You

GENERAL PLATE LAMINATED METALS are made by permanently bonding a *thin* layer of silver to a *thicker* inexpensive base metal. This gives you metals that are not only less expensive than solid silver but are stronger, harder and more serviceable for better performance. The silver, or other precious metal, provides better electrical conductivity or corrosion resistance . . . the base metal cuts your costs way down. General Plate Laminated metals are available in sheet, wire and tube with the silver on one side, both sides. Inlaid stripe, elevated stripe and edgelay mater als for economical contacts are also available. Write for complete information on the General Plate story.

GENERAL PLATE DIVISION
of Metals & Controls Corporation
812 FOREST STREET, ATTLEBORO, MASSACHUSETTS

Mention Item NED-9305 when writing

ARBOR BEARINGS and COLLARS



AVAILABLE FOR IMMEDIATE SHIPMENT

ARBOR BEARINGS

Kearney & Trecker Arbor Bearings are available for all standard style A and style B milling machine arbors in both outer support and intermediate support bearing lengths.

ARBOR COLLARS

Kearney & Trecker Arbor Collars are available for all standard style A and style B milling machine arbors, in lengths of ¼" — 5/16" — ⅜" — ½" — ¾" — 1" — 1¼" — 1½" — 2" and 3".

For complete information on arbors, cutters, and other tools for milling and boring write for new catalog C-10D.

KEARNEY & TRECKER MILWAUKEE MACHINE TOOLS

KEARNEY & TRECKER CORPORATION
6748 West National Avenue
Milwaukee 14, Wisconsin

Mention Item NED-9306 when writing

IMPROVED Conveyor Trolley

Simplification of design of the Link-Belt drop-forged ball-bearing overhead conveyor trolley has reduced the number of parts, with resulting low maintenance and unusually high load bearing capacities. Adequately sealed; smooth, quiet and efficient in operation. Reasonably priced . . . permits quick installation on new or existing systems . . . remarkably trouble-free in operation.

Ask for Folder No. 2241-A

LINK-BELT COMPANY
2410 W. 18th St., Chicago 8, Ill.

11,110

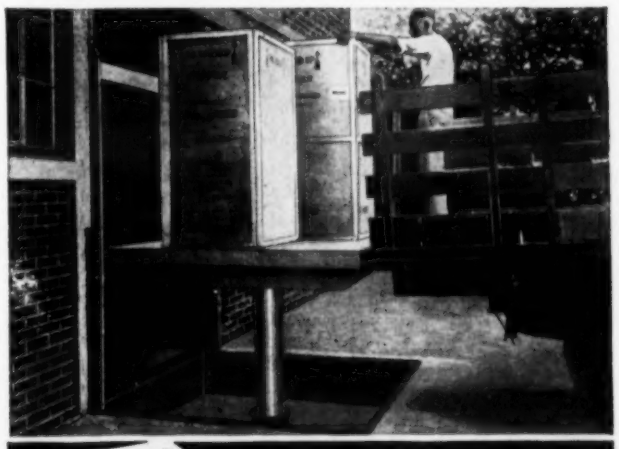
LINK-BELT *Ball-Bearing* TROLLEY

Mention Item NED-9307 when writing

NEW CATALOG SHOWS HOW TO *Lift Loads Faster!*

You can slash labor costs by using Levelator Lifts for loading and unloading jobs . . . and for feeding and receiving materials from presses, shears, etc. Levelator car rises quickly and smoothly as oil is forced into powerful hydraulic jack by simple electric pumping mechanism or compressed air. Operation safe, dependable, economical. Installation simple. Write for Catalog RE-202.

ROTARY LIFT CO., 1124 Kansas, Memphis 2, Tenn.



Rotary LEVELATOR* LIFTS

*Reg. U. S. Pat. Ofc.

Mention Item NED-9308 when writing

If you want Longer, More Satisfactory Service than you have ever received from a steam valve—

Try Sicol Control Valves

DEPENDABLE

DIRECT ACTING • REVERSE ACTING

• Bodies are steam bronze, all other castings being bronze. Standard seat rings are Stellite-faced on the seating surface. V-port discs are SOLID STELLITE cast in molds. The result is thorough dependability throughout a pleasingly long period of service. Try Sicols now!

DEPENDABLE SICOL VALVES

The SINCLAIR-COLLINS VALVE COMPANY

452 MORGAN AVE • AKRON 11, OHIO

Mention Item NED-9309 when writing

HEAT WHERE YOU WANT IT-- WHEN YOU WANT IT-- without waste

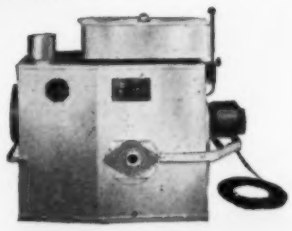
THE ORIGINAL HERMAN NELSON Gasoline-Burning Portable Heater

- Provides Quick, Clean, Safe Heat—without soot, fumes or open flame!
- Abundant fresh, heated air—forced to areas where most needed!

These time-tested, job-proved Portable Heaters step up winter production by eliminating delays caused by cold weather. Can be used for countless applications requiring temporary or emergency heat. Especially suited to jobs requiring a self-contained, self-powered heating unit. Full 250,000 BTU per hour capacity—enough to heat three ordinary five room houses—yet no bigger than a kitchen stove!

Also Available

New Herman Nelson De Luxe Model Portable Heater — Oil Burning—Electric Motor Powered —Automatic Ignition — 250,000 BTU per hour.



New Herman Nelson Economy Model Portable Heater — Oil Burning — Electric Motor Powered — Low First Cost — 125,000 BTU per hour.

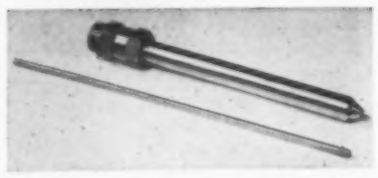
Write for Interesting Free Booklet on "COST CONTROL"

THE HERMAN NELSON CORPORATION MOLINE ILLINOIS

Since 1906 Manufacturers of Quality Heating and Ventilating Products

Mention Item NED-9310 when writing

BOTTLE FILLER HEAD



Fabricated of type 304 stainless steel, this bottle filler head eliminates dripping and consequent liquid loss. Larger tube, which is 7/16 x 0.072-inch, has ends formed by flame spinning. Smaller tube, which operates inside larger tube, is 5/32-inch 27-gage stock and has ⅛-inch bead on one end. Head eliminates need for fiber or rubber seats. Tubing made by **Carpenter Steel Co.**, Alloy Tube Div., P. O. Box 116, Roselle, N. J.

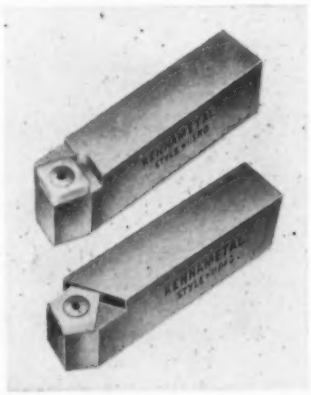
Mention Item NED-9311 when writing

DUAL-PRESSURE PUMP

Available in wide range of combinations, Universal Dual pumping units are designed to serve plants or processes requiring both high and low pressure hydraulic service. On low pressure side, combinations range from 12 to 40 gallons per minute output at 240 pounds per square inch and on high pressure side, from 1.25 to 5 gallons per minute at up to 5000 pounds per square inch. Driven directly by 3 to 15-horsepower motors, pumps are mounted on reservoir and are equipped with relief valves, unloading valves, necessary piping and oil cooler. Pressures are adjusted readily. Made by **Universal Hydraulic Machinery Co.**, 285 Hudson St., New York 13, N. Y.

Mention Item NED-9312 when writing

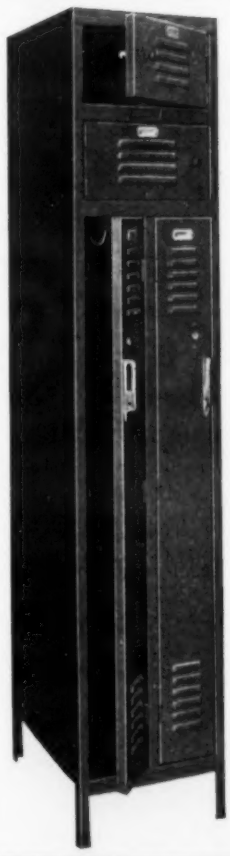
CARBIDE-TIPPED TOOLS



Small Kendex cutting tools having shanks ½, ⅝, ¾ and 1-inch square incorporate flat tip that is held to steel shank with countersunk flat-head cap screw and socket nut. Tips are made in square, round, triangular and pentagonal shapes. Round tips are regularly furnished in grade K6 Kennametal sintered carbide and are primarily intended to use in machining cast iron. Furnished in grades K6 or K3H, other tip styles are suitable for machining steel, cast iron and other metals.

Tips can be rotated readily to provide succession of sharp cutting edges without changing setting of tool holder. When all of available cutting edges become dull, tip can be discarded so that no grinding is necessary. Separate tips, ground ready for use, are available for individual tool designs. Made by **Kennametal Inc.**, 171 Lloyd Ave., Latrobe, Pa.

Mention Item NED-9313 when writing



A SPACE SAVER!

The Penco Two-Person Steel Locker, Type 734, is designed for use in cramped quarters or for any installation where a saving in floor space is an important consideration. Two persons are comfortably accommodated in the space usually allotted to a single person.

The Usual High Quality Penco Construction Conforms to Federal Government Specifications

Write for literature. Permit Penco Engineers to determine the most efficient arrangement for your requirements.

PENN METAL CORPORATION of PENNA.

1869 Penco

Reg. U. S. Pat. Off.

L. Lewis Sagendorph, Founder,

82 Oregon Ave.

Philadelphia 48, Pa.

Fabricators of Steel Lockers, Cabinets, Shelving and Corrugated Metal Pipe In Business Continuously Since 1869

Mention Item NED-9314 when writing

This BULLETIN May SAVE You PRODUCTION TIME and MONEY

*REG. U. S. PAT. OFF.

THE latest James G. Biddle Co. bulletin describes the "Meg" type of "Megger"* Insulation Tester—an instrument that provides a quick easy means for anyone to measure electrical insulation and conductor resistance almost anywhere. The "Meg" Tester is your insurance against many preventable electrical failures and consequent production delay. It is ideal for field or shop . . . direct reading, self-contained, and housed in a sturdy plastic case. It's simple to operate, too. Just make connections, turn the crank of the built-in d-c generator and read resistance directly from position of pointer over scale. Write today for new *Bulletin 21-45-D.*

JAMES G. BIDDLE CO.
Electrical & Scientific Instruments
1316 ARCH STREET, PHILADELPHIA 7, PA.

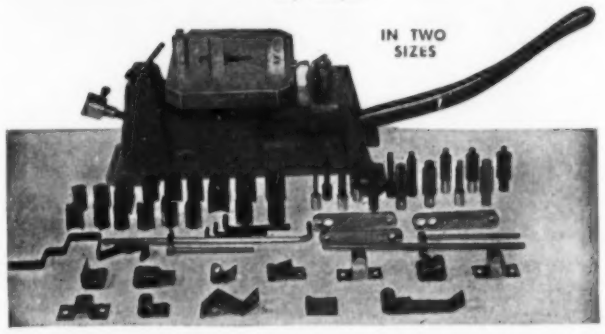
Mention Item NED-9315 when writing

THE FAMOUS MULTIFORM BENDER CUTTER

Produces Without Special Tooling — Saves Die Costs Saves on Expensive Presses

The illustration at the left shows just a few pieces produced on our famous Multiform Bender-Cutter. This efficient machine is useful in all lines of trade for production, experimental, and sample work. Short runs up to "5000." It punches holes, cuts the steel, and bends any shape.

IN TWO SIZES



FIVE-IN-ONE-TOOL

IT BENDS FLAT AND TUBULAR STOCK INTO ANY SHAPE. CUTS AND PUNCHES FLAT STOCK

J. A. RICHARDS CO., 905 NORTH PITCHER ST. KALAMAZOO 60F, MICH.

Mention Item NED-9316 when writing

NEW Nicholson G.P. Machinist's File

G.P. Machinist's File

The "happy medium" in general purpose files! Virtually "two files in one." Combining the principles of the single cut Mill and the double cut Flat files, it gives both *metal-removing speed* with *smooth finish.*

The G.P. Machinist's is not intended to supplant files designed to accomplish some particular job in the very best manner and the shortest possible time. But to the mechanic working on *aluminum, bronze, cast iron, malleable iron, mild steels,* or *annealed tool steels,* it is an excellent file for hundreds of fabricating and machine-shop jobs.

FEATURES: Same shape as regular Flat file, but does not taper in thickness. Its single cut teeth are divided by angular serrations—to produce shorter cutting edges, to break up filings, to help remove stock rapidly yet smoothly. 8", 10", 12" and 14" lengths available through your industrial distributor.

FREE BOOK, "FILE FILOSOPHY"

NICHOLSON FILE COMPANY
34 Acorn Street, Providence 1, R. I.
(In Canada, Port Hope, Ont.)

NICHOLSON U.S.A. NICHOLSON FILES FOR EVERY PURPOSE

Mention Item NED-9317 when writing

"CANTON" CRANES
Simplify MATERIAL HANDLING

● Lifting heavy loads in awkward places is no problem when "Canton" Portable Cranes are used. Made of light tubular welded steel in 8 sizes, capacity: 1 to 3 tons.

FOR FULL DATA, WRITE TODAY FOR BULLETIN 445

The HILL ACME Company
"CANTON" DIVISION 6404 Breakwater Ave CLEVELAND 2, OHIO

Mention Item NED-9318 when writing

ANYONE can set it up for FASTER HANDLING

LAMSON
LIGHTWEIGHT
PORTABLE CONVEYOR

Saves up to 30% of package handling costs

It's strong, rigid and durable. A man can set it up in a few minutes.

Large, small and irregular shaped packages ride easily over the *full length* ball bearing rollers.

Full length roller contact with package prevents swerving and package falling from the conveyor.

Adaptable to indoor... and outdoor use

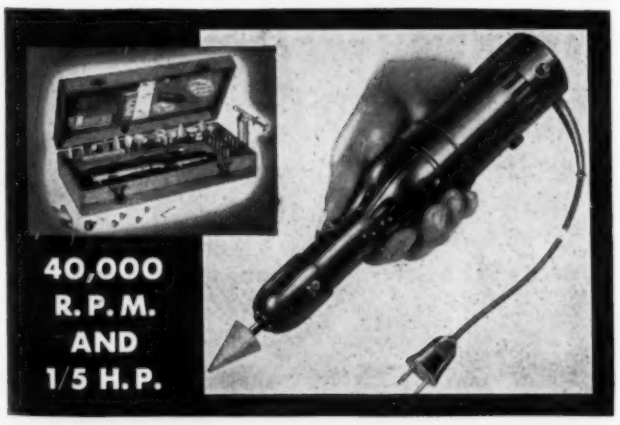
The Lamson Portable conveyor is unsurpassed for loading or unloading trucks, trailers and freight cars. Has innumerable uses in the warehouse, delivering packages from one section to another.

Made in straight or curved sections . . . in standard lengths of 10'. Each section carries up to 460 lbs. of live weight evenly distributed.

SEND FOR FREE FOLDER

LAMSON CORPORATION
550 Lamson St., Syracuse, 1, N.Y.

Mention Item NED-9319 when writing



IDEAL FOR CARBIDE CUTTERS

Speed with power with precision. PRECISE 40, the fastest, most powerful electric handtool made, weighs only 40 oz. *Built for production.* Mills, grinds, polishes, deburrs any material from file-hard steel to bronze, plastics, wood or rubber. Imagine, with tungsten carbide cutters PRECISE 40 *mills* the hardest steel!

PRECISE 40 in cool, shockproof, plastic case operates on AC-DC. Use it as a handtool or as a motorized quill in vise, lathe, mill or on your production set-up. Many accessories and rotary tools available. Also COOLFLEX Flexible Shaft attachment with 9-oz. air-cooled handpiece.

Write FOR CIRCULAR

GRINDS
MILLS
DEBURRS
ENGRAVES
DRILLS
FINISHES
SHARPENS
POLISHES

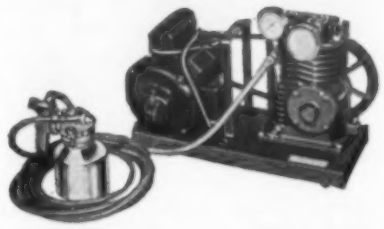
PRECISE PRODUCTS CO., 1346 CLARK ST., RACINE, WIS. U.S.A.

THE NEW PRECISE 40

Mention Item NED-9320 when writing

PORTABLE SPRAY OUTFIT

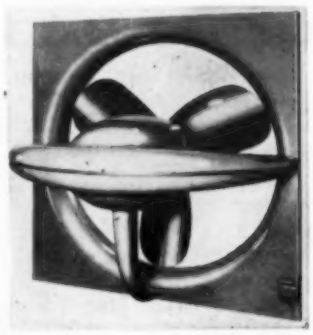
Competitively priced, single-cylinder, portable Princess paint spraying outfit is powered by ⅓-horsepower split-phase motor and can be used for wide range of operations. Unit carries many features of larger Pressure Queen spraying equipment and is recommended for finishing small products with industrial paints, enamels, lacquer or varnish. In addition, it can be used for lubricating machinery and automotive equipment, inflating tires and other jobs. Outfit is furnished complete with regulating valve, pressure gage, hose and spray gun. Made by **Campbell-Hausfeld Co.,** 193 Railroad Ave., Harrison, O.



Mention Item NED-9321 when writing

EXHAUST FAN

Improved model A Ventura propeller fan is designed for exhausting foul air, fumes and odors. Construction features include easily mounted square panel, smooth and easy to clean motor enclosure, terminal box with all wiring totally enclosed and Aerocurve three-bladed propeller. Air deliveries are in accordance with standard test code adopted jointly by NAFM and ASH&VE. Made by **American Blower Corp.,** 6005 Russell St., Detroit 32, Mich.



Mention Item NED-9322 when writing

SMALL CONDENSATION PUMP

This series 4100 condensation pump is small, compactly constructed unit capable of handling any capacity up to 6000 square feet equivalent direct radiation against discharge pressure up to 20 pounds. All parts are easily accessible from front for quick inspection and servicing. Entire motor and impeller assembly can be lifted from pump housing without disconnecting piping. Bronze impeller has smooth surfaces within passages and is fitted with oversize carbon type rotary seal. Unit is powered by capacitor start, ¼-horsepower, dual voltage motor which is dynamically balanced. Vertical mounting above pump and dripproof enclosure protect motor from moisture. Condensate is collected in 15-gallon steel tank incorporating noncorroding float which actuates single-pole switch. Made by **Sterling, Inc.,** 3720 N. Holton St., Milwaukee 12, Wis.

Mention Item NED-9323 when writing

IS RPM YOUR "HEADACHE"?

HERE'S YOUR SOLUTION FOR INDUSTRIAL GEARING

Are you puzzled by problems involving gearing or slow-speed drives?

Westinghouse facilities for the design and manufacture of industrial gearing are immediately available.

Extreme accuracy in manufacturing . . . a wide range of heat-treating processes . . . careful inspection and testing . . . assure gearing that fits requirements exactly and provides long service life.

For help on your gearing problems, call your nearest Westinghouse office, or write Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Penna. J-07266

Westinghouse
INDUSTRIAL GEARING

Mention Item NED-9324 when writing

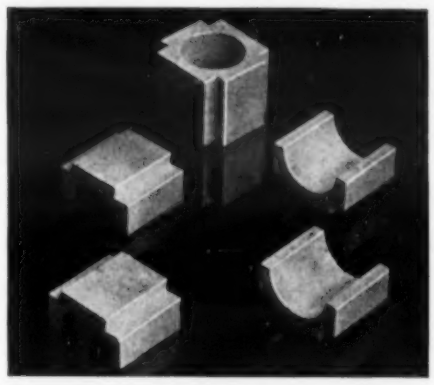
HYDRAULIC POWER
UP TO 100 TONS!

You'll find a hundred uses for a Hein-Werner Hydraulic Jack in your plant. These time-saving, labor-saving jacks are great for pushing, bending, moving or lifting, where trouble-free power up to 100 tons is required. Made in models of 1½, 3, 5, 8, 12, 20, 30, 50 and 100 tons capacity. For complete details consult your industrial supply distributor or write us.

HEIN-WERNER
CORPORATION
WAUKESHA, WIS.

Mention Item NED-9325 when writing

POWDER METALLURGY



for IRREGULAR SHAPED PARTS

● One reason why parts made from Johnson LEDALOYL Bronze are lower in cost is because they require no machining. This is particularly true when the shape is odd or irregular. One punch of the press and the part is produced to close tolerances. The self-lubricating action of LEDALOYL provides additional economies in long life and smooth operation. Excellent delivery.

Write today for descriptive literature.

JOHNSON BRONZE
SLEEVE BEARING HEADQUARTERS
580 S. MILL STREET NEW CASTLE, PA.

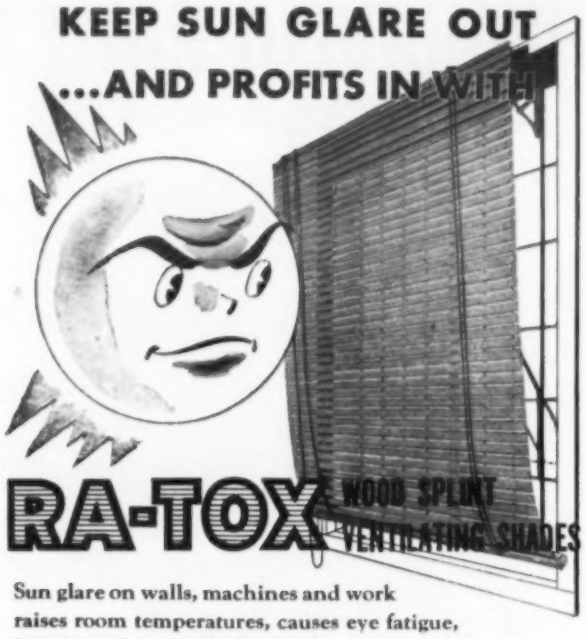
Mention Item NED-9326 when writing

The du Mont Corporation, Greenfield, Mass.
Please mail Descriptive Folder and Price List D together with the name of the Mill Supply Distributor that can show us the complete range of *Minute Man* Kits.

Company.....
Address.....
Name and Position.....

Mention Item NED-9327 when writing

KEEP SUN GLARE OUT
...AND PROFITS IN WITH

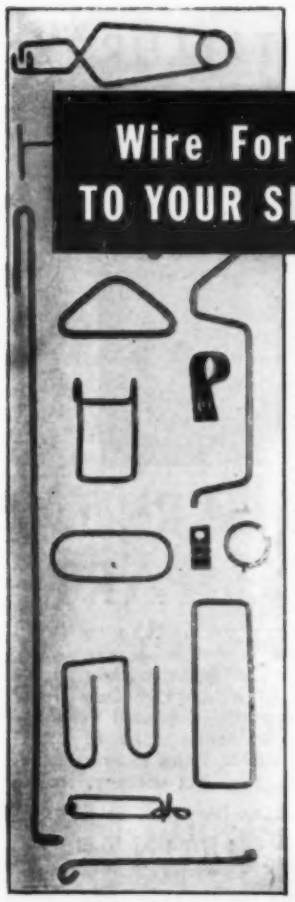


RA-TOX WOOD SPLINT VENTILATING SHADES

Sun glare on walls, machines and work raises room temperatures, causes eye fatigue, lowers worker morale. Keep your plant at top efficiency with RA-TOX SHADES. Attractive, easy to operate, low cost, long wearing. Made in types and sizes for all types of industrial windows. Write for folder.

THE HOUGH SHADE CORPORATION
Industrial Division
1105 JACKSON STREET • JANESVILLE, WISCONSIN

Mention Item NED-9328 when writing



Wire Forms Finished TO YOUR SPECIFICATIONS

● Supplying wire forms in a wide variety of finishes is routine business with us. Whether you want nickel, cadmium or zinc plating, bonderized enamel, parkerized or copper coated finishes—you can count on Sommer.

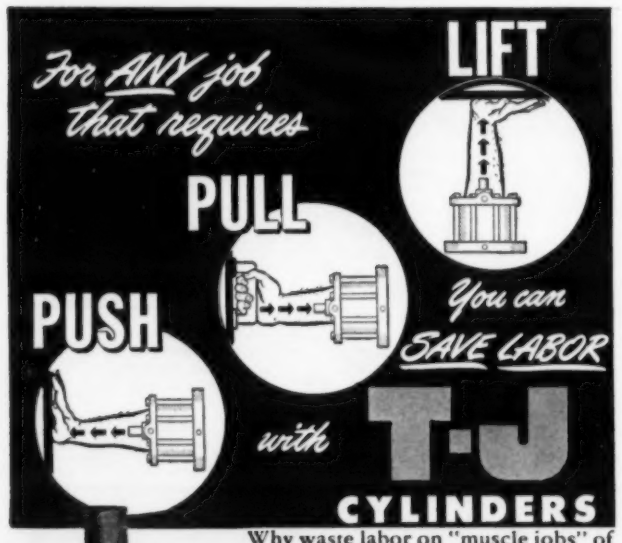
Complete forming, stamping, cut-threading and butt welding of light metal parts are also among our services. Fast, automatic machines and years of experience assure precision, volume production and satisfaction.

Let's look into that problem of yours. Send sample, blueprint or drawing. No obligation, of course.

SOMMER METALCRAFT CORPORATION
(Formerly Jeschke Wire and Specialty Company)
200 POSTON DRIVE
CRAWFORDSVILLE, INDIANA

Mention Item NED-9329 when writing

For ANY job that requires



You can SAVE LABOR with T-J CYLINDERS

Why waste labor on "muscle jobs" of pushing, pulling, lifting or control operations? T-J Cylinders will do it *automatically . . . with accuracy . . .* and *cut costs!*

For 100 lb. or 50,000 lb., there's a T-J Air or Hydraulic Cylinder that's *right* for your requirements. Many standard sizes and styles . . . both cushioned and non-cushioned types. Precision-built . . . backed by 31 years of know-how . . . dependable. Write for catalogs. The Tomkins-Johnson Co., Jackson, Michigan.

TOMKINS-JOHNSON
RIVETORS . . AIR AND HYDRAULIC CYLINDERS . . CUTTERS . . CLINCHORS

Mention Item NED-9330 when writing

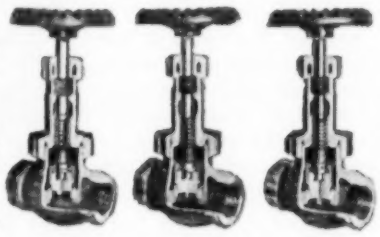
ELEVATING DUMPING BUCKET

Materials can be dumped at any height up to 100 feet when this all-steel dumping bucket is used in conjunction with O.K. portable elevator. Bucket unit has roller assembly which trips loads at desired height, and it can be attached within few minutes time. This elevator carries loads weighing up to 2500 pounds to height of 100 feet at maximum speed of 200 feet per minute. Hoist units are rated at 10, 18 or 28 horsepower. Elevating dumping bucket with roller attachment is available as separate unit. Use of this equipment facilitates handling of materials on wide range of industrial construction operations. Made by **O. K. Clutch & Machinery Co.**, Florence St., Columbia, Pa.

Mention Item NED-9331 when writing

GLOBE & ANGLE VALVES

Disk and seat combinations of 300-pound bronze globe and angle valves are interchangeable for full portway and throttle portway use. Constructed with back-seated rings having pressure-tight joint between seat ring threads and line pressure, valves have either heat-treated stainless steel plug disks and seats of approximately 500 Brinell hardness or nickel alloy radial disks and seats. In body, ribs support stressed areas; and alloy in stem resists corrosion, abrasion and distortion.



0541 0545 0551

Having nickel alloy radial disk and seat, Fig. 0541 valve is suitable for service up to 300 pounds pressure where throttling is not required, but where pressures and operating conditions tend to shorten valve life. Having longer contact area, Fig. 0545 full-port stainless steel plug disk and seat type valve is recommended for severe operating conditions where some throttling is required. For most severe service where constant throttling is required, Fig 0551 throttle-port stainless steel cone-plug disk valve is suggested. This construction allows 75 per cent of full flow. Made by **Fairbanks Co.**, 395 Lafayette St., New York 3, N. Y.

Mention Item NED-9332 when writing

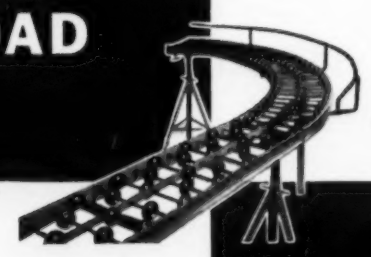
DO YOU KNOW?

■ THIRD National Materials Handling Show will be held at Convention Hall, Philadelphia from January 10 to 14. The exposition, one of the five largest annual industrial shows to be held in this country, will be devoted to various systems of handling materials in production and shipment. This year, show will be sponsored jointly by management and materials handling divisions of ASME and MHI. Groups will conduct 5-day conference. Details available from Clapp & Poliak, Inc., 350 Fifth Ave., New York 1, N. Y.

Mention Item NED-9333 when writing

LET GRAVITY TAKE THE LOAD

Sections: 5 ft. and 10 ft.
Standard widths: Wheel Type 11½ in., Roller Type 11½ in. and 16 in.
Two or more sections may be bolted together for greater widths. We bore the holes and supply bolts and nuts at no additional cost.
Curves: 5 ft., 8 ft., 12 ft., 45° or 90°



WRITE FOR DESCRIPTIVE FOLDER

WHEEL TYPE
6 to 16 staggered wheels per foot. 10 wheels standard. Odd lengths and different wheel alignments available.

ROLLER TYPE
2 inch diameter rollers placed 1 to 5 per foot. 4 rollers standard.

METZGAR GRAVITY WHEEL and ROLLER CONVEYORS

METZGAR CO., 416 Douglas, N.W.
GRAND RAPIDS 4, MICH.

Mention Item NED-9334 when writing

Beverly THROATLESS SHEAR

• UNIVERSAL . . . makes intricate, angular, radii and straight cuts with equal efficiency.
• Positive rake produces neat, clean edges free of burr.
• Free-cutting . . . handles lightest material without distortion.
• Compound leverage . . . great power with little effort.
• High grade tool steel blades adjustable for wear. Easily replaced.
• B-3 Model (illustrated) has ball-bearing hold down for easy control of heavier gauges. Beverly Shears also available with H.C. H.C. blades for handling Stainless.

See your Dealer . . . or write direct for information and illustrated Catalogs.

Made in 3 models to handle 14 gauge, 10 gauge and ¼". Welded, all-steel stands available for Beverly Shears.

The BEVERLY SHEAR MFG. Co.
3006 W. 111th St.
Chicago 43, Ill.

Mention Item NED-9335 when writing

BLACK DIAMOND
PRECISION DRILL GRINDER

EVERY SHOP USING QUANTITIES OF SMALL DRILLS SHOULD BE OPERATING A BLACK DIAMOND. THERE'S NO OTHER LIKE IT.

ANY quantity of small gauge and fractional drills can be kept sharp and ever ahead of production demands with a Black Diamond Drill Grinder.

The use of skilled labor is not necessary because anyone can operate this machine, keep all drills properly ground with smooth lips of uniform length—at the proper angle and correct clearance for fast cutting.

Black Diamond grinding insures fast, precision drilling, reduces drill breakage, saves expensive drill stock and cuts drill sharpening costs —50% and more.

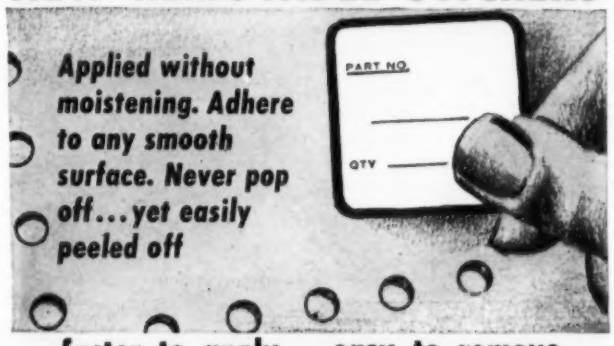
The built-in Diamond Dresser keeps the grinding wheel sharp cutting and the Web Thinning Attachment efficiently cares for grinding all types of Notched points.

Write for New Bulletin

BLACK DIAMOND SAW & MACHINE WORKS, INC.
NATICK, MASSACHUSETTS

Mention Item NED-9336 when writing

NEW REMOVABLE STICKERS



faster to apply . . . easy to remove

Magic adhesive backing of revolutionary Kum-Kleen Stickers makes them easier to apply... easy to remove. Simply press them on with finger-tip pressure—*no moistening* required. Adhere to any smooth surface, including metal, glass, plastic and wood. Never pop off like water-gum stickers nor rip off like string tags . . . yet peel off easily when their job is done.

Manufacturers everywhere are switching to these superior Kum-Kleens as inspection, rejection and identification stickers. You'll see why when you receive *your* free samples. Write today to Dept. NED-12.

Kum-Kleen
SELF-ADHESIVE LABELS

AVERY ADHESIVE LABEL CORP., Monrovia, Calif., 41 Park Row, N. Y. 7; 608 S. Dearborn St., Chicago 5; 3049 E. Grand Blvd., Detroit 2; 2123 E. 9th St., Cleveland 15, and all principal cities. Canada: Enterprise Sales, Toronto.

Mention Item NED-9337 when writing

NEW "CB" Series PERECO

fully equipped single-unit

Electric Laboratory and Shop Furnaces

2500° F. for normal use (up to 3000° F. occasional "flash" heat-ups)

Here's the newest in Pereco Electric Furnaces (CB-55) for multiple heating tasks requiring close control of extremely flexible heat cycle. Ready to use after simple hook-up. Size 32" deep, 32½" wide, 64" high. *(Also in larger sizes.)* Chamber 12" d. x 8¾" w. x 6" h. Uniform heat from 6 Globar elements. All controls on front panel; automatic temperature controller; current input meter; 36-tap auto-transformer with switch interlock; circuit breaker cut-off switch; and safety pilot-light. Wedge-fit counterbalanced door. 230-v., 60-cyc., 1-ph. A. C., with variable control from 3.5 to max. 11 KW. Write today. Connections for introduction of atmospheres can be supplied as optional equipment.

PERECO also makes standard and special electric furnaces for any temperature 450° to 2700° F.

PERENY EQUIPMENT COLUMBUS OHIO

PERENY EQUIPMENT CO.

Dept. G, 893 Chambers Rd., Columbus 12, Ohio

Mention Item NED-9338 when writing

VIBRATIONLESS

Cyclohm

Capacitor Type Induction Motors

Here is a capacitor type motor that is precision built for quiet, smooth performance — accurate bearing alignment... perfect rigidity. The Cyclohm 29 Size is the outstanding value in motors for recording, tape pulling, facsimile work and many other jobs. Available in non-synchronous, and two types of synchronous — reluctance torque and hysteresis torque. Capacitor can be used either on or alongside motor. Ball bearings or sleeve bearings. 1/100 to 1/10 horsepower; various speeds, voltages and frequencies available. Write today for complete information.

CYCLOHM MOTOR CORPORATION
DIVISION HOWARD INDUSTRIES, INC.
5-17 46th Road, Long Island City 1, N. Y.

Mention Item NED-9339 when writing

Better welds, bigger profits through faster production with the new 1948 *Ransome* Power and Idler Turning Rolls

Capacities **(with rubber tired rollers)**
MODEL A—4½ tons
MODEL B—20 tons
MODEL C—45 tons

Features like these mean less handling, more welding, longer trouble-free operation:

- Anti-friction bearings for easy rotation under heavy loads
- New lowered drive mechanism for unobstructed loading from either end of rolls
- Steel-and-bronze worm wheel for greater resistance to stresses

Write for Bulletin 228 today

INDUSTRIAL DIVISION *Ransome*
MACHINERY COMPANY, Dunellen, New Jersey

Subsidiary of
WORTHINGTON PUMP AND MACHINERY CORPORATION

Mention Item NED-9340 when writing

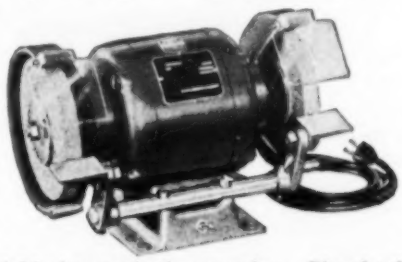
WIRE-TYING TOOL

Cast bronze, precision machined Piper Form Tie tool will handle all wire sizes up to No. 7. Wire ends can be tightened and tied and tool removed in as little as 30 seconds. Unit was originally developed for tying forms for concrete, and it facilitates making of ties on 2 x 4-inch and 4 x 4-inch studs. Tool weighs approximately 3 pounds. Made by **Safety Specialties,** 2219 N. Vancouver Ave., Portland 12, Ore.

Mention Item NED-9341 when writing

BENCH TYPE GRINDER

Furnished with one coarse and one fine 6 x ¾-inch wheel, Grindmaster ¼-horsepower bench type grinder is suitable for grinding, buffing, tool sharpening, polishing, wire brushing and other light production and tool room work. It incorporates adjustable tool rest to permit contact with wheel at any desired angle and wheel guard and transparent eye shield to protect operator. Standard single-phase motor operates on 110-volt 60-cycle current and is available at present in ¼ and 1/3-horsepower ratings. Syncrosnap switch assures smooth performance, eliminates burnouts of starting windings and prolongs life of windings and contacts. Made by **Torq Electric Corp.,** 1062 Interstate St., Bedford, O.



Mention Item NED-9342 when writing

ELECTRIC PYROMETER

Steel mills and chemical plants as well as other industrial organizations can use this portable electric pyrometer for recording, controlling or indicating temperatures of heating processes or for setup of experimental operations in laboratories. Unit is arranged so that six points of heat up to 2200° F can be recorded or controlled. In addition, pyrometer can be used for semi-automatic program control for heat cycles or for automatic heat cycle program operation. Other applications include use on equipment for preheating before and stress relieving after welding. Unit can be employed also with systems requiring resistance heating. Made by **Electric-Arc, Inc.,** 150 Jelliff Ave., Newark 8, N. J.

Mention Item NED-9343 when writing

New **ARO** *Push-Pull Tappers*

★ ***Automatically Reversible***

★ ***For Tapping, Re-Tapping***

Speed up tapping and re-tapping operations... cut down costs... with the new ARO Push-Pull Tappers! Automatically reversible—push for forward . . . pull for reverse. Twelve new models in wide speed range—450—750—1100—2500 r.p.m. Capacity 450 r.p.m. ¼" tap in ⅛" sheet steel. Re-tapping, chasing and cleaning up to ⅜". Designed with *higher torque . . . variable speeds* for unlimited field of metals . . . *simplified tap changing and adjusting . . . trouble-free reversing mechanism* . . . Aro-built dependability. See your Aro Jobber or write for new bulletin. The Aro Equipment Corp., Bryan, Ohio.

ARO AIR TOOLS

Mention Item NED-9344 when writing

NEW STRAPPING TOOLS

A complete, postwar, newly designed line of Signode tools—from high speed, semi-automatic equipment to high tension stretchers and super-easy operating sealers—offers a completely new kind of performance for the shipper.

A-2 SEAL FEED semi-automatic machine for production strapping of boxes and cartons.

NEW SE SEALER— light, powerful, easy crimping action.

SIGNODE "ANSWER BOOK"

Gives you the details on these and other modern steel strapping tools. Write:

SIGNODE STEEL STRAPPING COMPANY
2632 N. WESTERN AVENUE, CHICAGO 47, ILLINOIS

SIGNODE

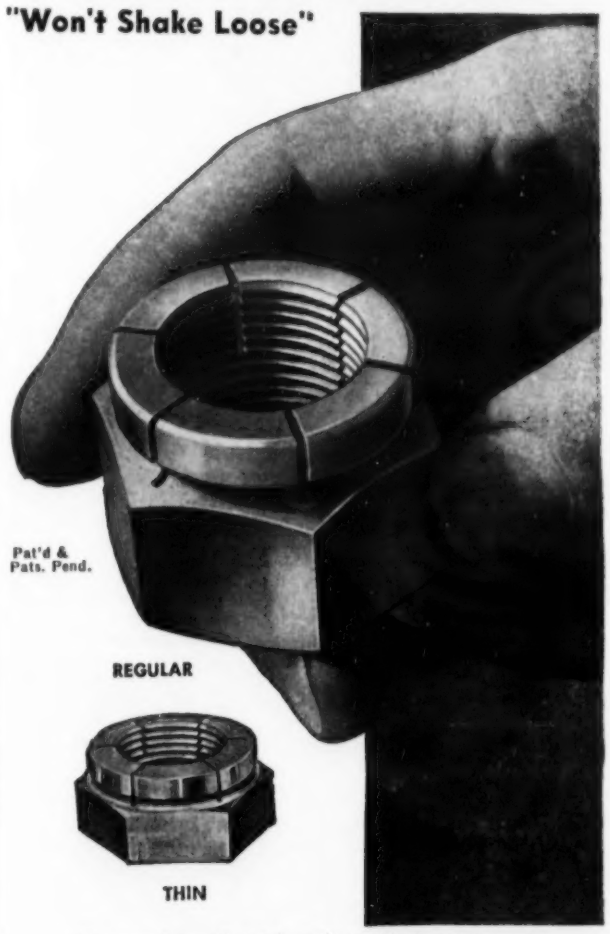
Mention Item NED-9345 when writing

ASK FOR SAMPLES

FLEXLOC ONE-PIECE

SELF-LOCKING NUTS

"Won't Shake Loose"



The one-piece, all-metal, resilient "Flexloc" is becoming widely accepted, because it is processed to have an exceptionally uniform torque, and because it is a stop, a lock and a plain nut all in one.

All its threads are "live" and load-carrying; "Flexloc" accommodates itself to a wide range of thread tolerances, and can be used over and over again without losing much of its torque . . . is not affected by temperatures commonly met within the industrial field of Mechanical Engineering . . . and being a "stop" nut, it stays locked in any position on a threaded member . . . and last, but not least—it won't shake loose!

The *Thin* "Flexloc" has become very popular because its *tensile* is so high and the space it occupies so small.

Sizes from #6 to 2" in diameter—in "regular" and "thin" types—in NC and NF thread series. Write for *"Flexloc" Catalog.*

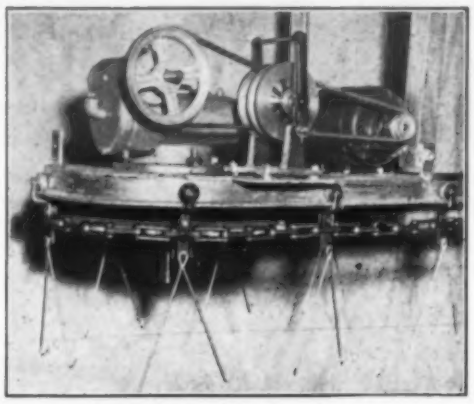
OVER 45 YEARS IN BUSINESS

STANDARD PRESSED STEEL CO.

JENKINTOWN, PA. Box 581
CHICAGO • DETROIT • INDIANAPOLIS
ST. LOUIS • SAN FRANCISCO

Mention Item NED-9346 when writing

KEYSTONE JUNIOR CONVEYORS



100% prefitted. Bolted joints. No track welding, cutting or fitting required for installation. Easily installed. Low first cost. Overhead or floor supported. Load capacity 75# per trolley. Rivetless Drop Forged chain 2" pitch. Ball-bearing trolleys.

KEYSTONE JUNIOR CONVEYORS are identical to their big brothers—the 348 and 458 conveyors, which are the accepted standard throughout the world. The Keystone Junior picks up where the 348 leaves off. Handling loads of 75# per trolley or live loads of up to 10,000# it is a Little Giant. Caterpillar or Corner Drives available. Vertical turns as small as 2' Radius. Horizontal turns as small as 9" Radius. Rotating hooks available for use in spray booths, ovens, etc. Conveyor speeds from 3-I.P.M. to 80 F.P.M. available.

Write for Bulletin No. 448

KEYSTONE CONVEYOR CO.

21750 West Eight Mile Rd. Detroit 19, Michigan

▲ Mention Item NED-9348 when writing ▲

▲ Mention Item NED-9349 when writing ▲

FLASH-O-LENS

ILLUMINATED MAGNIFIER DESIGNED FOR INDUSTRIAL INSPECTION

Send for this Free NEW FLASH-O-LENS Catalog Today!

READ how industry eliminates guesswork from important inspection jobs by using Flash-O-Lens for accurate, quick industrial inspection.

Portable Battery Models and Electric Plug-in Models available with 5, 7, 20, or 40 power lenses.

Priced from $9.35

Use coupon for free illustrated catalog.

E. W. PIKE & CO. ELIZABETH 3 NEW JERSEY

Flash-O-Lens spotlights as it magnifies inspection of:

Castings • Engravings
Glass • Grain
Industrial Finishes
Leather • Metals
Milk • Paint
Paper • Stamps
Photographs
Sand • Seeds
Textiles

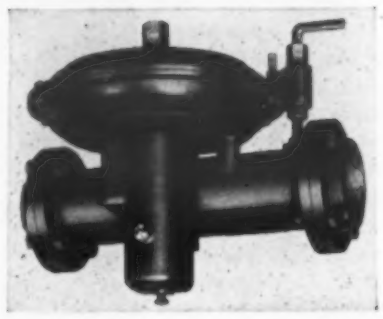
E. W. Pike & Co.
Elizabeth 3, N. J. (NED-12-48)

Please send me a free copy of your catalog on Flash-O-Lens Illuminated Magnifiers for Industrial Inspection.

Name..... Title.....
Company.....
Address.....
City..... State.....

▲ Mention Item NED-9350 when writing ▲

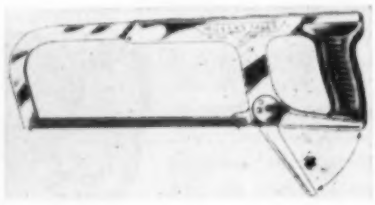
TEMPERATURE CONTROL VALVE



Improved series CR McKee automatic temperature control valve features compactness, pilot actuation, flange mounting and lightness in weight. Valves are designed for all types of air-controlled combustion systems and are available as solenoid operated, steam and thermostatic types. By means of high and low control thumb nuts, operating range can be set for any desired maximum or minimum of valve operation. Pressure range is from 2 ounces to 4 pounds, and motive power for valve operation is supplied by same air that is being regulated. Neoprene diaphragm is used. Made by **Eclipse Fuel Engineering Co.**, 738 S. Main St., Rockford, Ill.

▲ Mention Item NED-9351 when writing ▲

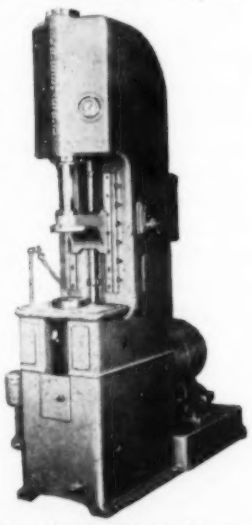
HACK SAW



Uniform blade tension, long blade life and facilities for rapid blade change are provided by this plastic handled model No. 300 adjustable hack saw frame. Lever action applies positive and correct tension on blade and eliminates need for wing nuts. Blade is inserted in any one of four directions, lever is snapped back into position and saw is ready for operation. Made by **Millers Falls Co.**, Greenfield, Mass.

▲ Mention Item NED-9352 when writing ▲

GENERAL PURPOSE PRESS



Self-contained model G6-S-W-C hydraulically operated general purpose press is designed for minimum deflection in broaching and assembly work requiring accurate alignment. Driven by 10-horsepower electric motor, press exerts maximum pressure of 6 tons. Downward speed of ram is adjustable from 20 to 300 inches per minute with return speed at rate of 460 inches per minute. Press will accommodate work up to 12 inches in diameter. Daylight opening is 21 inches maximum and 3 inches minimum, and ram travel is adjustable from 1 to 18 inches. When press is used for assembly or die work, it can be furnished with dual ram control as safety measure. In addition to 6-ton model illustrated, 4 and 8-ton units are available. Write for bulletin No. 357.18. Made by **Greenerd Arbor Press Co.**, Dept. G, 41 Crown St., Nashua, N. H.

▲ Mention Item NED-9353 when writing ▲

REMOVE HARDENING SCALE

with LEIMAN BROS. PATENTED

SAND BLAST

Matt or Satin Finish

▲

Cabinet, Hose, Automatic and Special Types of Sand Blasts for Work on Metal, Plastics, Glass, Bakelite and all materials.

▼

Cleaning before Plating

QUICKENS MACHINING OPERATIONS

GREAT LABOR SAVERS

Get the Free Information

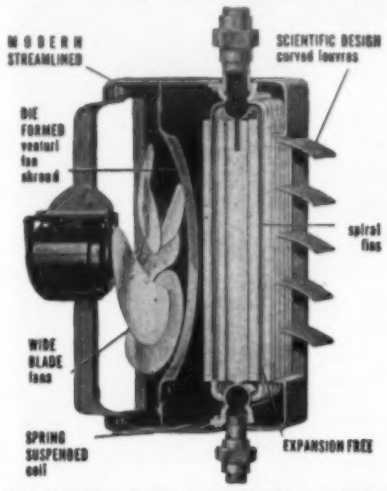
LEIMAN BROS. 167-2 Christie St. NEWARK, N. J.

MAKERS OF GOOD MACHINERY FOR 50 YEARS

▲ Mention Item NED-9354 when writing ▲

Unit Heater . . sets new standard of quietness and heating efficiency

McCord Unit Heaters are a time proven product embodying design based on years of experience in the heat transfer field. These units are not only rugged in design and guaranteed for use on #150 p.s.i. steam pressure but are made attractive in appearance. Two outstanding features appeal to maintenance engineers—we use standard motors with standard bases which quickly permits the use of replacement motors should a motor fail in service—the heating element is made of individual spiral fin tubes which are free to expand independently without putting a strain on the brazed joints. The entire heating unit is spring suspended and floats free in the casing, eliminating rigid connections. Improved type fan blades deliver large volumes of air with minimum air noise and vibration which makes these units suitable for office and store use. A complete line of vertical projection type unit heaters and blast coils are also available. Catalog on request or write for new folder "Instructions for Maintenance of Unit Heaters," **McCord Corporation**, Detroit, Mich. *Advt.*



▲ Mention Item NED-9355 when writing ▲

• CONGRESS MULTI-V BELTS

√ Congress has just the belt you need! Five cross sections in all standard lengths. Also steel cable V-belts for those tough jobs—belts that have practically no stretch, that stay matched, that stand up under excessive shock loads. Huge stocks of V-belts on hand in Detroit and Los Angeles.

√ Stocks cover Congress sheaves from fhp to 200 hp, and include Q-D (quick detachable) heavy duty multi-groove sheaves.

√ And remember, Congress is the world's *largest manufacturer of fractional horse power drives.*

Let our experienced engineers engineer your drive!

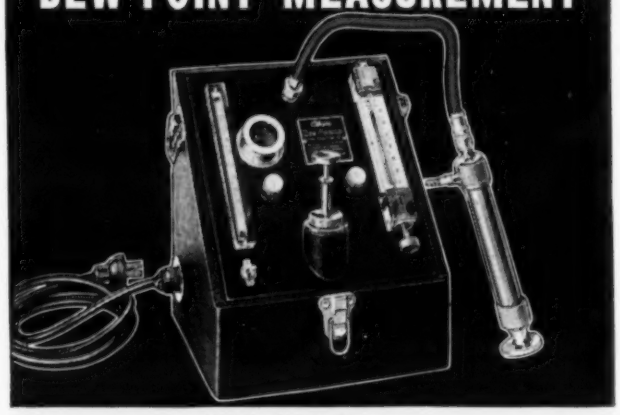
CONGRESS DRIVES DIVISION

TANN CORPORATION

3746 E. Outer Drive Detroit 12, Michigan

▲ Mention Item NED-9356 when writing ▲

FASTEST, MOST ACCURATE DEW POINT MEASUREMENT



with the ALNOR Dewpointer!

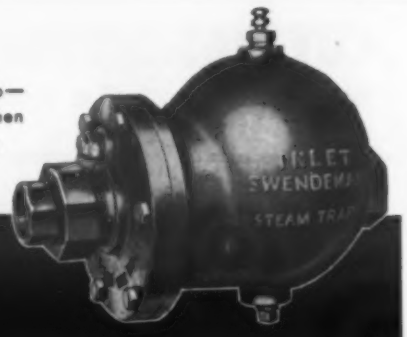
EXCLUSIVE ALNOR ADVANTAGES

- No external coolant required! True portability and convenience.
- Dew or fog is observed suspended in air—not on a polished surface! Two or more observers get same accurate results!
- Greater speed in measurement!
- Greater accuracy at all times!

Send for details and prices! Address Illinois Testing Laboratories, Inc. Room 529, 420 N. La Salle St., Chicago 10, Ill.

Alnor PRECISION INSTRUMENTS FOR EVERY INDUSTRY

▲ Mention Item NED-9357 when writing ▲



Swendeman Steam Trap—with Air Vent, Tell-U-When and Union Connection

THIS TRAP GETS THE MOST OUT OF STEAM

. . . and pays for itself in fuel savings!

The Swendeman Steam Trap captures and continuously discharges water and air that otherwise take the life out of steam. With a capacity up to 24,000 lbs. of water per hour, it operates on a simple float principle that removes condensate in a steady, uninterrupted flow. Body and head are high-quality castings . . . internal working parts are bronze, with stainless steel valve and seat . . . "Tell-U-When" instantly checks water seal . . . completely self-venting. Write for bulletin giving specifications and prices. T-1

THE LEAVITT MACHINE COMPANY
ORANGE, MASSACHUSETTS
Also Dexter Valve Reseating Equipment • Dexter Air Separators • Dexter Lathe Chucks • Athol Plumbing Supplies

Mention Item NED-9358 when writing

Are Your Assemblies Fastened with Screws?

DETROIT POWER SCREWDRIVERS

Will Eliminate Assembly Bottlenecks

Most Efficient Screw Pick-Up Hopper Ever Designed

Motorized barrel type . . . Will feed screws, nuts, washers, pins and special parts adaptable to hopper. These hoppers can be used on hydraulic or crank presses, riveting machines and special machines. Bracket designed for mounting at any angle. Four sizes: 10, 12, 16 and 24 inch diameters.

DETROIT POWER SCREWDRIVERS
BRING YOU GREATER EFFICIENCY, SPEED AND ECONOMY

There's a Size to Fit Your Needs

Model A drives No. 2 to No. 6 Screws
Model B drives No. 6 to 1/4" Screws
Model C drives 1/4" to 5/8" dia. Screws

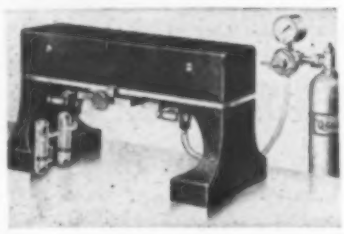
All machines equipped with magazine feed hopper shown above, to feed all types of screws—standard and special heads, Phillips heads, and slotless heads. Driving time 1 to 2 seconds per screw. Uniform tension. No marring of heads. No stripping of threads. Screws are always in sight of the operator.

Send sample assemblies with screws for production estimates and prices on proper equipment for job.

DETROIT POWER SCREWDRIVER CO.
2819 WEST FORT ST. • DETROIT 16, MICHIGAN

Mention Item NED-9359 when writing

GEIGER COUNTER



Adaptable for many nuclear research techniques, model D-46 'Q-Gas' Geiger counter is designed especially for efficient detection of soft ionizing radiation. It is used for detection of alpha particles and very soft beta radiation as well as counting of hard beta emitters. 'Q-Gas' is inexpensive stock mixture of gases which permits operation of counter at atmospheric pressure over wide range of temperature, with anode potential of 1450 volts. Equipment operates equally well whether gas is static or flowing, and any desired flow rate can be obtained easily. Instrument is supplied with tank of 'Q-Gas', regulators, sample pans and connecting cable. Made by **Nuclear Instrument & Chemical Corp.**, 647 N. Franklin St., Chicago 10, Ill.

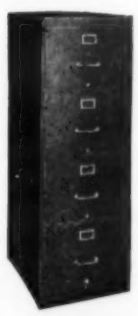
Mention Item NED-9360 when writing

ELECTRIC FORK TRUCK

Battery operated Transrider electric fork truck is comparatively low-cost unit which has 3000-pound maximum capacity and is designed for maneuverability in cramped working quarters. With telescopic lift mechanism, truck is able to raise loads to 130 inches. It features automotive type controls including foot brake and foot accelerator. Road clearance is ample for boxcar and unusual ramp conditions. Truck lifts, tilts and drives simultaneously. Having overall height of 83 inches and total length of 97¾ inches with 36-inch forks, truck requires 71⅝ inches to make right-angle turn. Five-degree forward tilt permits depositing of load at peak elevation. Made by **Automatic Transportation Co.**, 149 W. 87th St., Chicago 20, Ill.

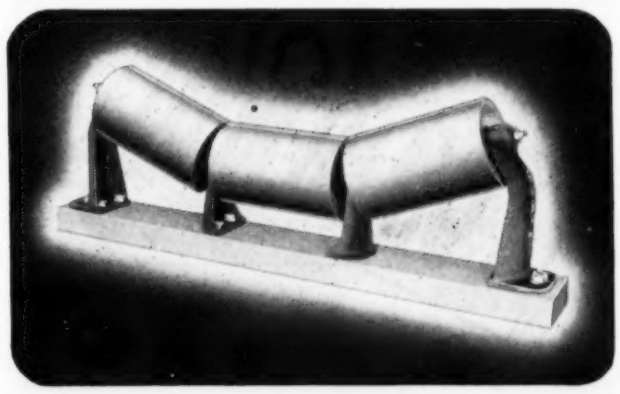
Mention Item NED-9361 when writing

FILE CABINET



Rigidly constructed, dustproof metal filing cabinet is designed so that locks can be added at any time and card drawers substituted for letter drawers when needed. Full-suspension drawers are equipped with side-suspended compressors which permit ready adjustment and positive locking. Finished in gray or green with aluminum hardware, file is available in wide range of styles in letter, legal and card sizes. Made by **Chapin Equipment Co.**, Dept. J-3, Box 109, Batavia, Ill.

Mention Item NED-9362 when writing



Only Robins Idlers . . . give you these advantages

1. **One-Shot Lubrication.** Requires only *half* the time to lubricate . . . only *one* walkway on your conveyor!
2. **Triple-Grease Seal.** Seals grease in—locks dirt out. Patented . . . exclusive . . . effective!
3. **Rigid Truss Construction.** Entire end bracket, center bracket and pulleys form a single unified member —stronger than *any other type of construction!*

Made in troughing and return types, roller or ball bearing. Prompt delivery. Write for bulletin 120-A1.

ROBINS IDLERS
ROBINS CONVEYORS DIVISION
HEWITT-ROBINS INCORPORATED, PASSAIC, NEW JERSEY

Mention Item NED-9363 when writing

NOW . . . Get the pump with all these features:

1. Pump and motor on one rigid frame
2. Drip-proof motor
3. Bronze wearing rings
4. Generous packing

A 2427

THIS HIGH EFFICIENCY, low cost pumping "package" is ready to hook up for a wide range of applications. Can be mounted in practically any position — fits into close quarters. Handles most liquids. Capacities from 15 to 1300 gpm, heads to 500 ft. Immediate delivery on many sizes of Electrifugal and other pumps. Send for Bulletin B6059D today!

Electrifugal is an Allis-Chalmers Trademark

ALLIS-CHALMERS
MILWAUKEE 1, WISCONSIN

Mention Item NED-9364 when writing

SYNTRON

"Vibra-Flow"

VIBRATORY FEEDERS

Will Handle—

—most all types of bulk materials — from light, fine powders to heavy, coarse lumps—hot or cold —dry or damp.

At—

—variably controlled rates from pounds to 500 tons per hour—from 110 or 220 or 440 volt, 50 or 60 cycle.

To—

—crushers, grinders, driers, screens, belt conveyors, etc.

An illustrated folder is available, or—if you'll send us the details of your problem—description of material to be fed, maximum feed per hour, desired length of trough, etc. —our Engineering Department will be glad to submit their recommendations.

SYNTRON CO.
405 Lexington, Homer City, Pa.

Mention Item NED-9365 when writing

BURGESS SNUBBERS • BURGESS SNUBBERS

Quiet engine operation

The biggest complaint against Diesel engines is excessive intake and exhaust noise. You can positively prevent this noise — and complaints—with Burgess Exhaust and Intake Snubbers. Pulsating gas flow which causes noise is smoothed to a quiet stream, with no harmful restriction. Send for free bulletin.

BURGESS-MANNING COMPANY
749-R EAST PARK AVE., LIBERTYVILLE, ILL.
Please send me information on Burgess Snubbers.
☐ Air intake ☐ Exhaust
Name.....
Company.....
Address.....
City.....State.....

Mention Item NED-9366 when writing

CESCO DUMPER

LIFTS AND DUMPS loads up to 500 lbs. of any free flowing material including liquids. Saves ⅓ man hours or more. Eliminates back breaking labor. Reduces overhead. Skips hold loose material, boxes, barrels, box trucks, drums or sacks. Choice of dumping heights to accommodate kettles, bins, vats or other receiving receptacles.

FREE FOLDER ON REQUEST

CESCO DUMPER

COLSON EQUIPMENT & SUPPLY CO.

1321 WILLOW STREET LOS ANGELES 13, CALIFORNIA

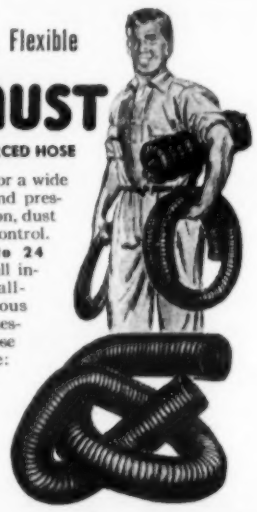
▲ Mention Item NED-9367 when writing ▲

HOSE FOR USE IN ANY INDUSTRY!

Light, Strong, Flexible

FLEXAUST

SPIRAL-REINFORCED HOSE



Flexaust is suitable for a wide variety of suction and pressure uses in ventilation, dust collection and fume control. **SIZES 1¼ inches to 24 inches.** Write for full information on this all-purpose hose. Various Flexaust types, accessories, and other hose types also available:

BLOFLEX *Non-reinforced collapsible*

PORTOVENT *Ring-reinforced retractable*

AMERICAN VENTILATING HOSE COMPANY

Dept. N-12, 15 Park Row, New York 7, N. Y.

Branch Offices:

New Orleans, La., San Francisco, Calif., Washington, D. C.

Plants: Amesbury, Mass.

▲ Mention Item NED-9368 when writing ▲

Cut HANDLING COSTS with MH*

*M H IS MASS HANDLING—*the systematic movement of the most units, in the shortest time, at the lowest cost.*

Double and triple savings on your handling operations with Towmotor Accessories, such as the Unloader illustrated, which provides mechanical unloading of materials, eliminating manual handling. You'll invest less—and get more—from Towmotor Fork Lift Trucks and Tractors.

TOWMOTOR CORPORATION
Division 25, 1226 E. 152nd St.
Cleveland 10, Ohio

Get the facts about Towmotor Mass Handling—learn how to apply modern handling methods to your own operation. Send for Job Study covering your industry today. No obligation.

TOWMOTOR THE ONE-MAN-GANG

FORK LIFT TRUCKS and TRACTORS

RECEIVING • PROCESSING • STORAGE • DISTRIBUTION

▲ Mention Item NED-9369 when writing ▲

THICKNESS DETECTOR

Improved model FMSS-5 Audigage thickness detector has been developed for nondestructive thickness measurement of steel, copper, aluminum, glass, unfilled plastics and other materials from one side. Typical applications include use on tanks, pipes, ship hulls, boilers, pressure vessels and sheet metal. Improvements include instrument indications which permit operation in noisy locations, adjustable frequency modulation which facilitates measurement of corroded equipment, permeability tuning unit for increased sensitivity, and increased frequency for measurement of steel down to 1/16-inch. Instrument is portable and battery operated for field use. Alternating current power supply can be furnished if required.

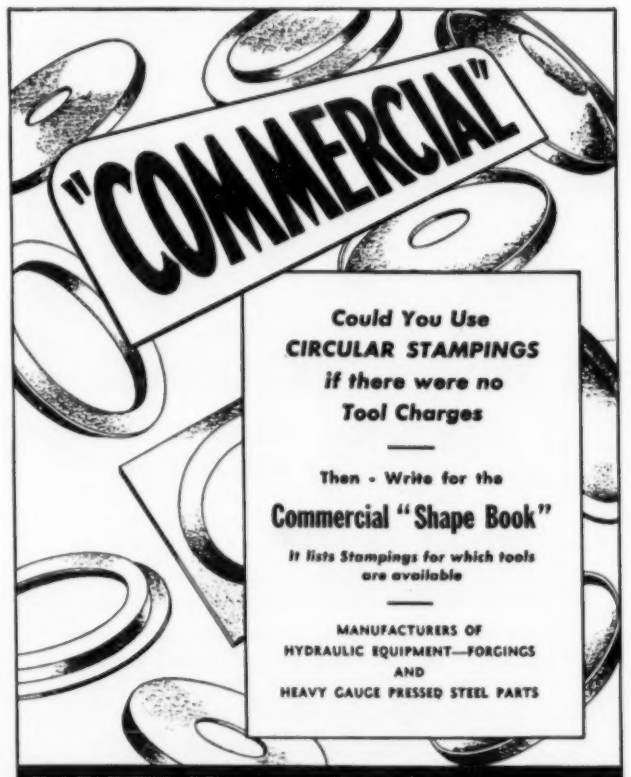
For operation, instrument is tuned to frequency which produces resonance in the unknown thickness. Resonance is indicated simultaneously by milliammeter and headphones to provide both visual and audible signals. Frequency at which resonance is indicated can be converted to thickness by use of conversion scale on instrument panel. Made by **Branson Instruments, Inc.**, Dept. A., Joe's Hill Rd., Danbury, Conn.

▲ Mention Item NED-9370 when writing ▲

PORTABLE PYROMETER

Of high resistance type for use with standard thermocouple assemblies, model 1460 portable pyrometer permits considerable variation in length and size of thermocouple and lead wires without affecting accuracy. It utilizes Alnico magnet which is highly resistant to shock, heat, vibration and stray fields. Construction of movement assembly assures accuracy within 0.5-per cent of full scale in millivolts under continuous handling. Instrument assembly is mounted as unit on black Bakelite panel which is equipped with cold end temperature adjustment and large low resistance insulated binding posts; and it is assembled in walnut case having removable cover, snap lock, leather carrying handle and rubber feet. Pyrometer can be used for measuring temperatures of furnaces, ovens, kilns, vats, mold dies, compounds, materials, liquids, gases, production machinery, power equipment, motors, engines and other equipment. It is available in thirteen ranges from 0-300° to 0-3000° F. Made by **Cole Instrument Co.**, Dept. Q, 1320 S. Grand Ave., Los Angeles 15, Calif.

▲ Mention Item NED-9371 when writing ▲



Could You Use CIRCULAR STAMPINGS if there were no Tool Charges

Then - Write for the

Commercial "Shape Book"

It lists Stampings for which tools are available

MANUFACTURERS OF HYDRAULIC EQUIPMENT—FORGINGS AND HEAVY GAUGE PRESSED STEEL PARTS

The Commercial Shearing & Stamping Company

YOUNGSTOWN 1, OHIO

MAIN OFFICE—Youngstown, Ohio Factories in Youngstown, Ohio and Chicago, Ill.

▲ Mention Item NED-9372 when writing ▲

CUT WASHROOM UPKEEP

With these exclusive Sperzel features

- OPEN FRONT AND BACK DESIGN . . cuts cleaning time to a minimum. No germ collecting crevices . . always sanitary.
- SELF-RAISING . . seat remains upright when not in use with bowl serving as urinal. Seat stays clean and dry.
- DURABLE . . . double strength plastic pads are shatter-proof, fire-proof. Assure long life [illegible] maintenance.
- SOLID PLASTIC . . . strong and durable. Plastic covered hinge is moisture proof, dirt free.

WRITE NOW for catalog for full details on model LP-20 (illus.), model LP-40 with self-sustaining hinge, and a complete line of conventional models.

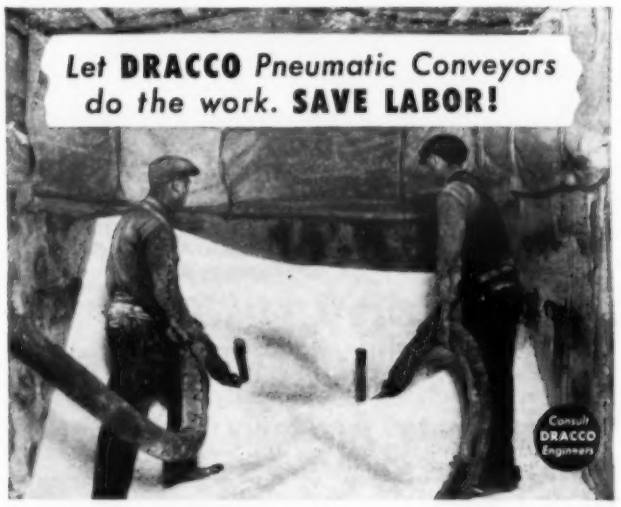
DEPT. NE.

THE SPERZEL COMPANY

All Sperzel Seats fit Standard Bowls

123 14th AVENUE S. • MINNEAPOLIS, MINN.

▲ Mention Item NED-9373 when writing ▲



In many plants much labor is unnecessarily wasted in handling chemicals, grains and granular materials. DRACCO Pneumatic Conveyors not only SAVE LABOR but make many other savings including the elimination of dust. They are profitable even for a small operation. It may pay to have DRACCO Engineers analyze your present handling methods. They have over 30 years of practical experience.

For Further Information Write

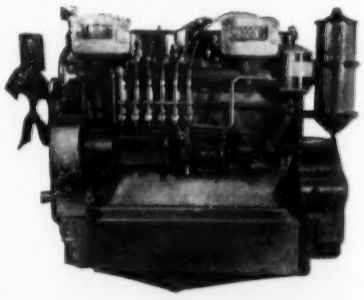
DRACCO CORPORATION

4053 E. 116th Street, Cleveland 5, Ohio New York Office: 130 West 42nd Street

PNEUMATIC CONVEYORS • DUST COLLECTORS

▲ Mention Item NED-9374 when writing ▲

SHEPPARD DIESEL POWER UNIT (Illustrated), 100 H.P. Sheppard Diesel, delivered complete. Others from 3.5 to 100 H. P., as generating sets, power units, marine propulsion and auxiliary Diesels.



NOW... DIESEL POWER for SMALL Engine Users

Here's why: Diesel's the Power Sheppard's the Diesel!

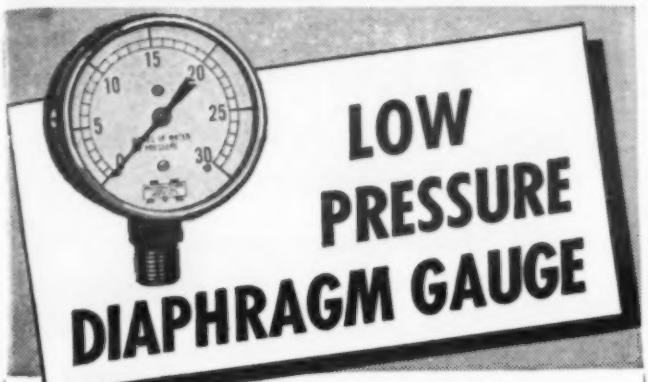
- Low fuel cost—¼ that of gasoline engines
- 3 to 5 times longer operating life than gasoline engines
- No carburetor, no ignition system, less maintenance
- Delivered complete, ready to operate, no extras to buy
- Starts, runs on safe, non-explosive Diesel fuel—resulting in lower insurance rates
- Pushbutton or automatic starting in any weather

Send For Complete Brochure Today!

Here's low-cost, dependable Diesel power for SMALL engine users! Sheppard Diesels will do any job a gasoline engine will do—at one-quarter the fuel cost—with less maintenance, fewer breakdowns, longer operating life. For portable, self-propelled or stationary power-driven original equipment — garden tractors, compressors, pumps, saws, mills, etc. Find out how Sheppard can help you solve your power problem. Write today for FREE Sheppard Brochure. No obligation! Address: R. H. Sheppard Co., Inc., 712 Philadelphia St., Hanover, Pennsylvania.

DIESEL'S THE POWER Sheppard's THE DIESEL

▲ Mention Item NED-9375 when writing ▲



Marshalltown Figure 83 is a very sensitive instrument utilizing a diaphragm for pressure communication, and is recommended for extremely low pressure service. The following standard dials reading in inches of water are available—0-15", 0-30", 0-60", 0-100", 0-150".

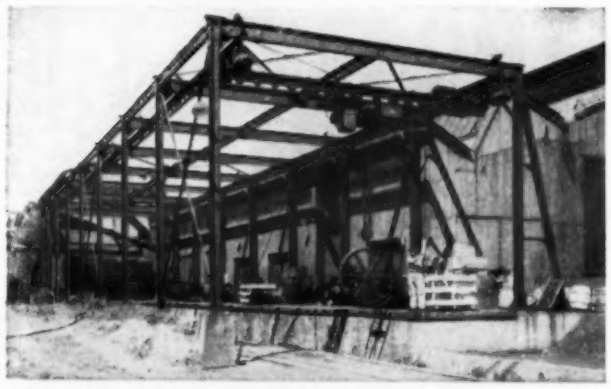
Ounce graduated dials can also be supplied in a range from 16 ounces to five pounds.

It is available in the 2½", 3½", and 4½" dial sizes and mounted in a black enameled, deep steel case. Write for details and price.

Marshalltown manufactures one of the most complete lines of indicating pressure gauges—there is a Marshalltown gauge for every purpose and pressure.

Marshalltown Mfg. Co., Marshalltown, Iowa

Mention Item NED-9376 when writing

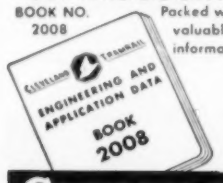


5 TON TRANSFER BRIDGE UNLOADS CARS AND TRUCKS . . . *Delivers Directly to Inside Building Without Rehandling*

This push-button-operated motor-driven bridge lifts loads up to 5 tons from trucks or railroad cars at any point along the loading dock. The bridge interlocks with the overhead rail at door enabling delivery of materials to and from points inside of building directly without rehandling. Speeds handling! Saves time! Cuts costs!

GET THIS BOOK!

BOOK NO. 2008 — Packed with valuable information

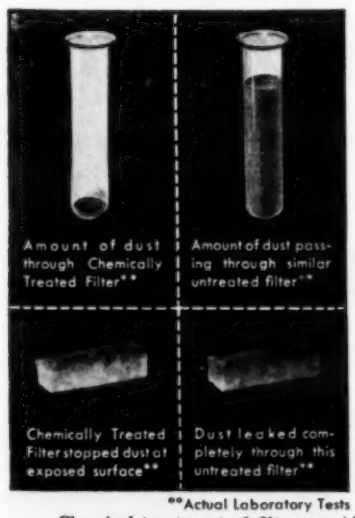


CLEVELAND TRAMRAIL DIVISION
THE CLEVELAND CRANE & ENGINEERING CO.
6626 East 285th St., Wickliffe, Ohio

CLEVELAND TRAMRAIL

Mention Item NED-9377 when writing

Acclaimed as One of the Greatest Advances in Respiratory Protection in Years



NEW AO* R-2000 RESPIRATOR with Chemically Treated Filter

**Actual Laboratory Tests

Chemical treatment of filter provides far greater efficiency, hence a far smaller filter (only five inches approximately) is possible. A smaller filter container is used for greatly superior comfort and improved front and side vision. There is no increase in low breathing resistance despite vastly increased filtering efficiency. Filter is disposable and equipped with a gauze pre-filter which adds to filter life by barring larger particles of foreign matter. Respirator may be worn with new AO R-18 Plastic Face Shield. Your AO Safety Representative can supply you.

*Approved by the Bureau of Mines.

Safety Division American Optical COMPANY

Southbridge, Massachusetts • Branches in Principal Cities

Mention Item NED-9378 when writing

GAS-FIRED UNIT HEATER

Employing either natural or manufactured gas, revolving unit heater combines gas burners, heat exchanger and combustion chamber with motor-driven Wingfoil fan and revolving discharge outlets. Combustion chamber and heat exchanger with extended fins are integrally cast gray iron. Designed for overhead location, unit projects heated air to working level and, by means of revolving outlets, circulates warmth in all directions. In summer, unit can be used without heat to circulate air. Made by **L. J. Wing Mfg. Co.**, 154½ W. Fourteenth St., New York 11, N. Y.

Mention Item NED-9379 when writing

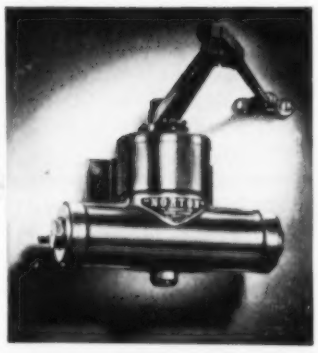
ANCHOR & DRILL KIT

To facilitate screw anchoring in wide range of materials, Sand-Scott plastic expanding screw anchors are available in assortment kit along with three carbide-tipped masonry drills. Anchors can be used for mounting screws in plaster, concrete, brick, tile, glass, sheet rock and other materials. Applicable to all materials, drills are especially suitable for use in concrete, tile, brick, marble and other hard products. They can be used with electric or breast drills and produce clean holes in 30 seconds. Made by **Holub Industries, Inc.**, 411 DeKalb Ave., Sycamore, Ill.

Mention Item NED-9380 when writing

ALUMINUM DOOR CLOSER

Having permanent mold aluminum case, 'broad-shouldered' door closer is sturdy, lightweight and rustproof and can be installed easily. Of rack and pinion hydraulic type, closer maintains positive door control at every point in movement. It incorporates leakproof shaft, Oilite bottom bearings, two speeds of regulation, and holder arms that permit door to be held at any desired opening. Finished in gold, aluminum, bronze, brown, black or prime coat, closer is available in all standard sizes with six types of holder arms and seven bracket styles. Made by **Norton Door Closer Co.**, Dept. NED, 2900-2918 N. Western Ave., Chicago 18, Ill.



Mention Item NED-9381 when writing

. . . JUST TRY 1

MOCCASIN BUSHING *on your most* **TROUBLESOME BEARING**

The success of Moccasin Bushings efficiency lies in their unique lubrication principle. Oil is drawn from a reservoir in the bearing housing and is distributed by capillary action in a continuous, unbroken film over the entire bearing surface. Drippage and seepage of oil is entirely eliminated, and under ordinary circumstances they require attention only two to four times a year—just try one on your most troublesome bearing. Guaranteed for satisfactory service. Write for folder No. 429 showing nine other styles of bushings.

***Moccasin* BUSHING COMPANY**
CHATTANOOGA TENNESSEE

Mention Item NED-9382 when writing

MORE POWER

from this NEW VARIAC

THE NEW TYPE V-20 VARIAC is designed for semi-high-power use. It is provided with a terminal box fitted with four knockouts for ¼-inch conduit or BX, and a newly designed, easy-to-grasp knob. The dial is engraved directly in output voltage from ZERO to 17% above line voltage, with extra large figures for easy reading at a distance.

SPECIFICATIONS

	TYPE V-20M	TYPE V-20HM
LOAD RATING (KVA)	3.45	2.3
Input Voltage:	115	230 or 115
Output Voltage: Zero to	115 or 135	270 or 230
Rated Current (Amperes):	20	8
Maximum Current (Amperes):	30	10
PRICE:	$55.00	$55.00

*Reg. U.S. Pat. Off.

WRITE FOR THE "VARIAC BULLETIN"

GENERAL RADIO CO.
Cambridge 39, Massachusetts
NEW YORK CHICAGO LOS ANGELES

Mention Item NED-9383 when writing

***Ageproof* VELLUM**

The quality of prints obtainable from any drawing is the real measure of its quality.

for Better Drawings for Better Prints

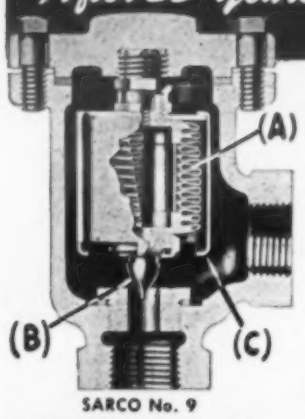
• Thousands of drafting rooms have come to realize that the only economical drawing or tracing paper is the one that permits rapid, clean, trouble-free work and an original which time or handling will not destroy. They demand Dietzgen's *Ageproof* Vellum. They call it the perfect drafting medium . . . the finest surface for pencil or ink drawing they have ever had . . . a surface and transparency unimpaired by repeated erasures . . . a surface that stays clean for sharper, clearer prints. Dietzgen's *Ageproof* Vellum is plasticized through and through for permanent transparency. No oil, wax or grease to turn rancid, bleed, fade of capture dirt and dust. No yellowing or brittleness after years of storage. For better drawings for better prints . . . every time and all the time, use Dietzgen's *Ageproof* Vellum. In rolls, cut sheets, and printed sheets. For supplies or test sheets, call on your Dietzgen dealer or the nearest Dietzgen office.

EUGENE DIETZGEN CO.
Chicago • New York • San Francisco • New Orleans
Pittsburgh • Los Angeles • Philadelphia
Washington • Milwaukee
Dealers in All Principal Cities

DIETZGEN
DRAFTING, SURVEYING & PRINT-MAKING MATERIALS, INSTRUMENTS & EQUIPMENT

Mention Item NED-9384 when writing

After 25 Years - STILL THE LEADER



SARCO No. 9
THERMOSTATIC STEAM TRAP

Sarco, the pioneer in high pressure thermostatic steam trapping, has continually improved its know-how, its equipment and its application experience.

No. "9" is still the leader because:

(A) Phosphor bronze heavy wall bellows, helically corrugated on special machines developed by Sarco. End closures brazed by electronic equipment. (B) Valve head and seat; stainless steel, renewable. (C) Patented shield protects bellows. Prongs prevent overexpansion. Large bellows and large orifice insure maximum real capacity. Fast action: Wide open when cold. Normal opening 10°F. below steam pressures.

Many thousands in service. Compare before you buy. Ask for catalog No. 250.

250

SARCO SAVES STEAM
SARCO COMPANY, INC.
Empire State Bldg., New York 1, N.Y.
SARCO CANADA, LTD., TORONTO 5, ONTARIO

Mention Item NED-9387 when writing

Your Material Handling is Easy

With Pittsburgh Collapsible Cargotainers

From Production Line

The Cargotainer receives parts as they come from machines. Empty Cargotainers are collapsed, take little space, are light-weight, can be kept handy

To Storage and Shipping

Fork truck takes filled Cargotainer from production to storage, then loads Cargotainer from storage to truck or freight car. There is no re-handling of parts.

To Assembly

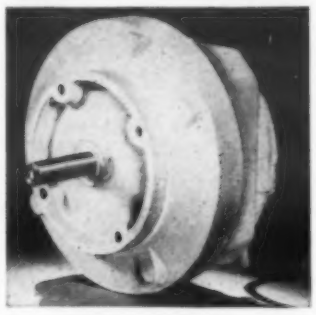
Cargotainers are received and stacked ready for assembly line. Inventory is easy—stock always visible. Fork truck delivers to assembly points.

Write today for free illustrated booklet to Pittsburgh Steel Products Company, 3258 Grant Building, Pittsburgh 30, Pa.

Pittsburgh Collapsible
CARGOTAINER
Pittsburgh Steel Products Company
Subsidiary of
Pittsburgh Steel Company

Mention Item NED-9388 when writing

SINGLE-BEARING MOTOR



Designed with single-bearing to assure accurate line-up in air gap, this shaded-pole motor is of four-pole type and has no-load speed of 1700 revolutions per minute and full load speed of 1550 revolutions per minute. Single bearing consists of two phosphor-bronze sleeve bearings, both of which are self-lubricating. They have ample felt-packed oil space between them.

Accurately ground rotor and precision bored stator assure quiet operation in driving wire recorders, turntables, fans and other electrical equipment. Motor shown is of open type, but units of enclosed type can be furnished. Three models available have continuous ratings of 1/100, 1/80 and 1/60-horsepower with ¾, 1¼ and 1¾-inch core stacking respectively. Larger ratings for intermittent service can be furnished. Made by **Electro-Engineering Products Co.**, 4826 W. Kinzie St., Chicago 44, Ill.

Mention Item NED-9389 when writing

RESPIRATOR

Protection against light concentrations of nuisance dusts encountered in woodworking plants, cement mills, some grinding operations, coal yards, grain elevators and similar exposures is afforded by inexpensive R-2900 respirator. It permits unobstructed front and side vision, has light retainer cup, and uses light-weight filter which is replaced easily. Molded rubber mask fits face positively and comfortably. Made by **American Optical Co.**, 1492 Mechanic St., Southbridge, Mass.

Mention Item NED-9390 when writing

HYDRAULIC DIAL GAGE

Utilizing direct action principle, Hydrodial hydraulic dial gage has shock resistant construction and is capable of withstanding surging and pounding hydraulic pressures. Gage is available in nine pressure ranges, lowest of which in 5 to 50 pounds and maximum, 500 to 5000 pounds. Dial face is white, numerals are black and crystal is shatter-proof plastic. Large calibrations can be read at distance of 50 feet. Made by A. Schrader's Son Div., **Scovill Mfg. Co.**, 471 Vanderbilt Ave., Brooklyn 17, N. Y.

Mention Item NED-9391 when writing

Common Sense Cap Screw Safety—
CLEVELAND
Top Quality
"High Carbon Heat Treated"

Made extra strong by DOUBLE EXTRUSION —the Kaufman Process

Dependable for strength, accurate fit and clean-running threads.

CLEVELAND Top Quality FASTENERS
THE CLEVELAND CAP SCREW COMPANY
2917 EAST 79TH STREET • CLEVELAND 4, OHIO
Warehouses: Chicago and Philadelphia
Ask your Jobber for Cleveland Fasteners

Mention Item NED-9392 when writing

Glass Bushings

NOW AVAILABLE TO MANUFACTURERS OF ELECTRONIC EQUIPMENT

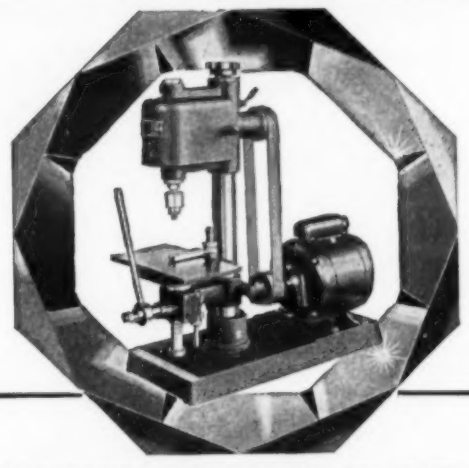
General Electric is now offering to other manufacturers the cast glass bushings it has used so successfully on many types of electrical equipment.

These bushings are cast of stable, low-expansion glass. They are attached directly to the apparatus without gaskets—by soldering, welding or brazing, thus forming a strong, permanent, vacuum-tight seal that eliminates moisture problems and often permits more compact, light-weight design.

Available to meet dry, 60-cycle flashover values of from 10 to 50 kv, and in current ratings of 25 and 50 amperes (in large sizes to 800 amperes), for single or multi-conductor. If you will send us a sketch and ratings of bushings you are now using, we will furnish you with samples of our standard glass bushings. See them and evaluate their advantages. Or write for our Bulletin GEA-5093, *Apparatus Sales Division, General Electric Company, 16-215, Pittsfield, Mass.*

GENERAL ELECTRIC

Mention Item NED-9393 when writing



PRECISION INSTRUMENT TAPPER
THE HAMILTON SUPER-SENSITIVE TAPPING MACHINE

Designed to meet the most exacting requirements of precision manufacturers. Patented power transmission permits centering of tap without cutting, and tapping to the very bottom of blind holes without tap breakage. Capacity from the smallest and finest tap to 10-32 inclusive. Silent and clean in operation. Our Bulletin T-47 gives full specifications. Write for it today!

THE Hamilton TOOL COMPANY
SUPER SENSITIVE DRILLING MACHINES · TAPPING MACHINES · PORTELVATORS
901 HANOVER STREET • HAMILTON • OHIO • U • S • A

Mention Item NED-9394 when writing

"There's no substitute for the ZIP!"

The Zip-Lift is the standout in quality — the original wire rope hoist with full magnetic push-button control. Tens of thousands of P&H Zip-Lifts are now in service. Why not benefit by this proved experience? Add one to your handling now — to boost production and cut costs! They're available for immediate delivery. For full details, send for Bulletin H20-4.

P&H ZIP-LIFT

HANDLE IT Thru-the-Air AT LOWER COST

P&H ELECTRIC HOISTS
4537 West National Avenue
Milwaukee 14, Wis.
HARNISCHFEGER CORPORATION
HOISTS · WELDING ELECTRODES · MOTORS · P&H · EXCAVATORS · ELECTRIC CRANES · ARC WELDERS

Mention Item NED-9395 when writing

HANNIFIN

PROTECTION for air operated equipment

HERE is the new air pressure regulator that gives you everything you want for control and protection of air operated equipment.

NO DANGER OF PRESSURE BUILD-UP. Thanks to the automatic safety relief feature of Hannifin's "Air Warden" valve design. No pressure build-up above setting of regulator even if valve is accidentally prevented from seating tight.

SAVES AIR. Easy to "back off" pressure without exhausting control valve. No air lost except excess pressure.

PRECISION CONTROL. Instrument type adjusting knob. Precision construction throughout. Write for the full story.

HANNIFIN CORPORATION
1101 S. Kilbourn Avenue Chicago 24, Illinois

HANNIFIN AIR WARDEN REGULATOR

▲ Mention Item NED-9396 when writing ▲

OUT IN FRONT!

Kester "RESIN-FIVE" Core Solder

Now, a new flux for cored solder. Kester's "Resin-Five" is more active . . . more efficient . . . more stable than any rosin flux and yet is *non-corrosive non-conductive.* For complete information contact Kester's Technical Department.

KESTER SOLDER COMPANY
4249 Wrightwood Ave., Chicago 39, Illinois
Factories Also At
Newark, New Jersey • Brantford, Canada

KESTER SOLDER

▲ Mention Item NED-9397 when writing ▲

SPEED-

DIE AND MOLD FINISHING

THE haskins WAY!

Haskins Type HS-4 equipment in die finishing service

★and that's with Haskins Flexible Shaft Machines. Designed to speed die and mold finishing, Haskins HS-4 equipment—½ H.P.—has a six-speed, Timken-bearing countershaft that develops up to 7800 R.P.M. Pedestal mounted at bench height, this portable machine delivers the constant power needed for continuous production. Haskins has a complete line of attachments, too, for all grinding, sanding, filing or polishing operations. For instance, a true running taper shank spindle extension makes it possible to get down into deep cavities. Write today for full information. **R. G. Haskins, 603 S. Washtenaw St., Chicago 12, Illinois.**

HASKINS
haskins
FLEXIBLE SHAFT EQUIPMENT

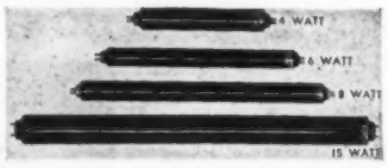
▲ Mention Item NED-9398 when writing ▲

VOLTAGE STABILIZER

Rated at 15 watts, model VR-6000 hermetically sealed voltage stabilizer is designed for input frequency range of 57 to 63 cycles, input voltage of 95 to 125 volts and output of 115 volts stabilized to plus or minus 1 per cent for both line and frequency regulation. Unit is oil-filled for cooling efficiency, has maximum resistance to shock and vibration, and is plated before painting to withstand corrosion. Features include stainless steel mounting studs and hermetically sealed terminals. Made by **Raytheon Mfg. Co.,** 104 Willow St., Waltham 54, Mass.

▲ Mention Item NED-9399 when writing ▲

BLACKLIGHT LAMPS



Consisting essentially of low pressure mercury arc, Raymaster blacklight lamps furnish source of long wave ultraviolet light which is filtered to remove all but trace of visible light. They are used to excite manufactured and natural fluorescent materials used in paint, dye, oil, aircraft, textile, mineral, marine, soil and food analysis, inspection and other fields. Energy peak is close to 3600 Angstrom units, and practically no radiation shorter than 3000 Angstrom units is produced. Light has no effect on eyes or skin. Available in 4, 8 and 30-watt sizes, lamps can be used with standard auxiliary operating equipment. Made by **George W. Gates & Co.,** Hempstead Turnpike & Lucille Ave., Franklin Sq., Long Island, N. Y.

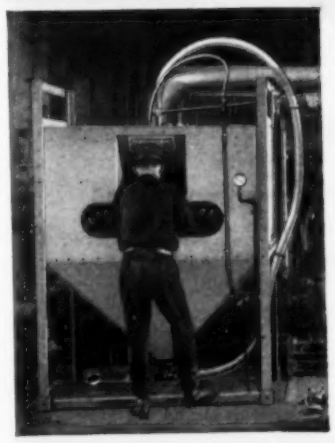
▲ Mention Item NED-9400 when writing ▲

PORTABLE HEATING UNIT

Fully portable Deluxe model heating unit is especially recommended for drying and curing of plaster, paint or concrete; thawing frozen areas, machinery, wheels, gears, hoists and drive chains; preheating engines and machinery; ventilating and heating of manholes; spot heating of materials, storage tanks or tools; and space heating of temporary buildings or storage areas. Utilizing prime white distillate as fuel, unit has 250,000 British thermal units per hour output. Forced hot air delivery is provided by electric motor driven fan, and standard equipment includes two 12-inch diameter by 12-foot long collapsible canvas ducts through which hot air can be directed exactly where needed. Cost of operation at peak output is approximately 40 cents per hour. Made by **Herman Nelson Corp.,** Moline, Ill.

▲ Mention Item NED-9401 when writing ▲

RUGGED... PRACTICAL... EFFICIENT PANGBORN BLAST CLEANING CABINET



The self-contained Pangborn Blast Cleaning Cabinet is highly flexible . . . adaptable to a wide range of work.

The operator has freedom of both hands to manipulate work and to guide treadle-operated nozzle.

Amazingly large production results from unusual volume and rapidity of cleaning.

For details about Pangborn Blast Cleaning and Dust Control Equipment, write: Pangborn Corporation, 294 Pangborn Blvd., Hagerstown, Maryland.

Pangborn
BLAST CLEANS CHEAPER
with the right equipment for every job

▲ Mention Item NED-9402 when writing ▲

SPEEDY AIR VISE

SPEEDS UP
✓ MILLING ✓ PUNCHING
✓ DRILLING ✓ BENDING
✓ TAPPING ✓ RIVETING

GRIPPING FORCE 15 TIMES AIR LINE PRESSURE

Speedy Air Vise helps you do dozens of operations faster, better, cheaper—by air pressure! Foot control valve opens and shuts vise instantly, leaving *both* hands free to produce *more!* Jaw opens up to 3 inches, holds castings, parts, jigs, etc. Compact and trouble-free.

Complete with Foot Control, Air Hose and *Fittings*.....only **$29.90**

Prompt Delivery from Your Supplier or Write Direct

W. R. BROWN CORPORATION • 5720 Armitage Ave. • Chicago 39, Ill.

AIR REGULATORS • AIR FILTERS • AIR GUNS • PORTABLE COMPRESSORS

▲ Mention Item NED-9403 when writing ▲

CLARK FORK TRUCKS • GAS-POWERED AND ELECTRIC BATTERY-POWERED • CLARK GAS-POWERED INDUSTRIAL TOWING TRACTORS • CLARK TRUCTRACTORS WITH TIP AND DUMP BODIES • ATTACHMENTS AVAILABLE FOR HANDLING SPECIAL TYPES OF MATERIAL

MATERIAL HANDLING *News*

a BIGGER exhibit of BETTER machines TO DO MORE WORK AT LOWER COST

the Third National Materials Handling Exposition

The 1949 Exposition will be held in Philadelphia January 10 through 14 and will constitute a broad view and preview of "industrial history in the making." It will be the most convincing demonstration of all time that the Science of Materials Handling is eternally new—that it is a never-ending process of evolving new and better methods and equipment to the end that our National economy can shake off the shackles of old, inefficient and time-consuming practices which have become prohibitively costly both in human energy and in dollars.

CLARK ELECTRIC AND GAS POWERED FORK TRUCKS AND INDUSTRIAL TOWING TRACTORS

INDUSTRIAL TRUCK DIV., CLARK EQUIPMENT COMPANY BATTLE CREEK 21, MICH.
REPRESENTATIVES IN PRINCIPAL CITIES THROUGHOUT THE WORLD
AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATEGIC LOCATIONS

▲ Mention Item NED-9404 when writing ▲

The World's Most Advanced 1/2" ELECTRIC DRILL

THE Silver Line BY Thor

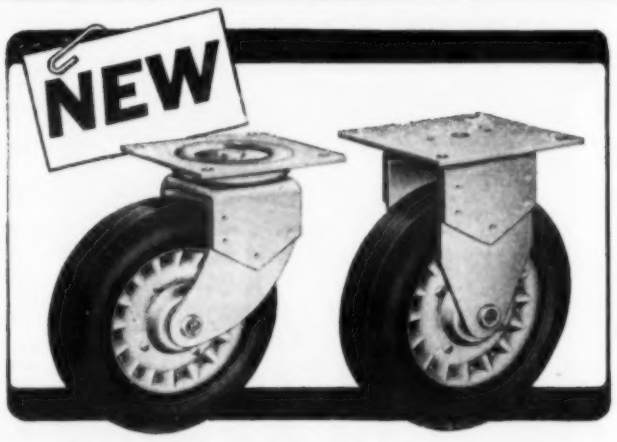
Much Smaller
Much Lighter
Far More POWERFUL!

INDEPENDENT PNEUMATIC TOOL COMPANY
AURORA, ILLINOIS
BRANCHES IN PRINCIPAL CITIES

Thor PORTABLE POWER TOOLS

Mention Item NED-9405 when writing

NEW



Bassick "CHEVRON" CASTERS

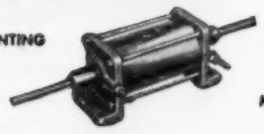
8" and 10" Swivel and Rigid with "Pseumatic" Wheels

These new casters have newly designed, all-molded, resilient wheels. Ideal for institutional and store trucks, industrial and commercial food carts and other applications requiring quiet, easy handling. THE BASSICK COMPANY, Bridgeport 2, Conn. Division of Stewart-Warner Corporation. *Canadian Division:* Stewart-Warner-Alemite Corporation, Ltd., Belleville, Ontario.

Bassick MAKING MORE KINDS OF CASTERS . . . MAKING CASTERS DO MORE

Mention Item NED-9406 when writing

DOUBLE-ACTION AIR CYLINDERS



Mounting	Bore			
Horizontal	1½"	2¼"	3"	4"	5"
Vertical		2¼"	3"	4"	5"
Face		2¼"	3"	4"	5"
Swivel		2¼"	3"	4"	5"

Length of stroke optional

The new Mead Air Power Catalog shows the full line of single and double-acting cylinders, and air-operated Presses, Vises, Chucks, Hammers, Work Feeders—for faster, money-saving production. Write!

MEAD SPECIALTIES COMPANY
4114 No. Knox Ave., Dept. NA-128, Chicago 41, Ill.

Mention Item NED-9407 when writing

OFFICE WIRE RECORDER

Designed specifically for business office use, Peirce dictation wire system consists of Executive Dictater on which one can record, listen or rewind and Super-Transcriber which is transcribing unit only. Both machines provide clear life-like voice reproduction. Lightweight Wire-o-matic cartridge is merely moved from dictator to transcriber and returned for reuse. Erasing is effected magnetically. Cartridge incorporates Exacto timer which is calibrated for up to 15, 30 or 60 minutes dictation and permits accurate indexing of all dictation. Recorder is equipped with pushbutton controls, fast rewind, automatic back-spacing, typewriter bar and foot-pedal. Made by **Peirce Wire Recorder Corp.**, 1328 Sherman Ave., Evanston, Ill.

Mention Item NED-9408 when writing

MOTOR LOAD CONTROL

Suitable for use on pulverizers, pumps, extruders and other motor-operated equipment, Flex-I-Trol electronic control maintains constant motor load by regulating input feed. Variable time delays and variable dead zone eliminate hunting and insure operation at maximum output. Control employs two identical radio type vacuum tubes, operates from 115-volt 60-cycle alternating current and is available in explosionproof or standard sheet metal housings. One model is suitable for motors of all ratings. Made by **G. C. Wilson & Co.**, 2 N. Passaic Ave., Chatham, N. J.

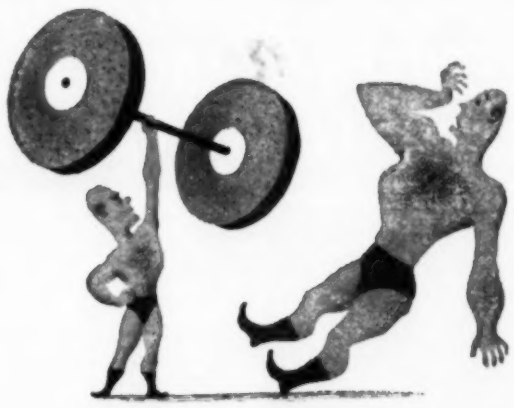
Mention Item NED-9409 when writing

SLIDE VIEWER

Enlarged images of 2 x 2-inch slides are projected on rear projection screen built into Kodaslide table viewer. It will accommodate either black-and-white or full-color transparencies made with either 35-millimeter or Kodak Bantam cameras and can be used in fully lighted room. Slide changer holds 75 cardboard or 30 double-glass slides, and both types can be intermixed.

Viewer is adaptable for use as selling tool by showing in full color enlarged pictures of equipment and services to prospective customers. In addition, viewer can be used in industrial training and educational programs to impress techniques and facts on trainee's mind. Completely portable, it can be used anywhere that 110-125-volt alternating or direct current power is available. Made by **Eastman Kodak Co.**, 343 State St., Rochester 4, N. Y.

Mention Item NED-9410 when writing



Using too much power? Again and again, Robertson resin-bonded and vitrified-bonded grinding wheels, mounted wheels and segments have demonstrated their ability to double and triple production and give you a substantial bonus in decreased power-costs. Let a Robertson engineer prove it on your own machines. Write on your business letterhead for a demonstration.

ROBERTSON MANUFACTURING COMPANY
TRENTON 5, NEW JERSEY

Mention Item NED-9411 when writing

• ECONOMICAL • EASY TO INSTALL

Dependable year-in and year-out performance at maximum efficiency and low operating costs are yours when you use CHROMALOX Electric Oven Heaters in your plant for drying, baking, dehydrating, finishing and similar applications. Even heat and exact temperature control insure peak production with minimum product rejects.

Get the full details NOW!

Send for Catalog 42 and "100 Ways to Apply Electric Heat" booklet which show Chromalox Oven Heaters at work.

EDWIN L. WIEGAND CO., 7509 THOMAS BLVD., PITTSBURGH 8, PA.

See other advertisement on page 4.

CHROMALOX IB-73

ELECTRIC HEAT FOR MODERN INDUSTRY

Mention Item NED-9412 when writing

MANY INDUSTRIAL ROLL PROBLEMS are solved by using

SHAF-TITE* ROLLS

Many patented constructions provide strongest possible shaft setting. Your choice of many different types and materials—wood, rubber, iron, brass, stainless steel plastic, etc. Whatever your roll problem, put it up to Rodney Hunt.

SEND FOR NEW CATALOG NO. 48
Most complete publication of its kind

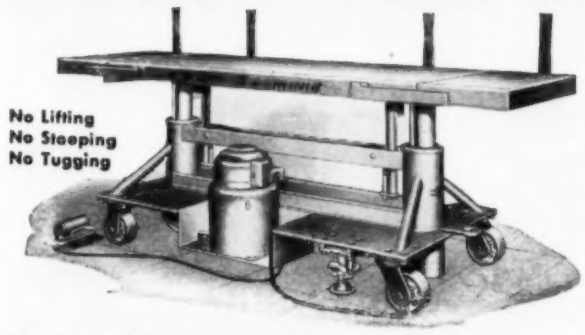
Industrial Roll Division
RODNEY HUNT MACHINE CO.
73 Maple Street, Orange, Mass.

*Reg. U.S. Pat. Off.

Mention Item NED-9413 when writing

Speed Up Press and Shear Work!

LYON-Raymond SHEET & STRIP FEEDING TABLE



1. Levels Sheet or Strip Stock with Press Bed.
2. Lessens Worker Fatigue
3. Increases Efficiency
4. Cuts Handling Costs
5. Serves for Feeding or Receiving
6. Portable, but Locks in Place
7. Has No Installation Cost
8. Facilitates Faster Feeding.
9. Reduces Spoilage
10. Can Be Used for Die Handling
11. Made in Wide Range of Sizes

As Illustrated: Capacities 4000 lbs., 6000 lbs.

Other designs have capacities 10,000 & 20,000 lbs. in double cylinder type.

For loads of 2000 lbs., L-R single pedestal type. Tilting top for inclined beds.

WRITE...
For free folder on Lyon-Raymond Sheet feeding tables. Exhibiting at National Materials Handling Show, Philadelphia, Booths 710 & 711.

LYON-Raymond Corporation
751 Madison St. Greene, N. Y.

Mention Item NED-9414 when writing

TOPS ON SPEED

IN HANDLING COIL STOCK

AUTOMATIC centering and balancing of coil stock is done with speed, ease and saving of material with LITTELL Automatic Centering Reels. Plain and motor driven types. Capacities, 800 to 6,000 lbs. Coil Cradles for coils up to 20,000 lbs.

Other Littell press-room equipment includes: Roll and Dial Feeds, Power Straighteners, Scrap Winders, Air-Blast Valve. Vacuum and Mechanical Pickers.

Littell Reels center and balance coil stock. Ball bearings. Adjustable brake and bars. With loading lever, one man can load coils up to 300 lbs.

F. J. LITTELL MACHINE CO.
4161 Ravenswood Ave.
Chicago 13, Ill.

REQUEST BULLETINS

SPEED WITH SAFETY

LITTELL REELS

▲ Mention Item NED-9415 when writing ▲

Actually pulling a fully loaded 2,000 lb. Electric Hoist up a 5% grade . . . .

New Trojan TRACTOR

The *TROJAN TRACTOR* can be applied to *TRAVEL* . . .

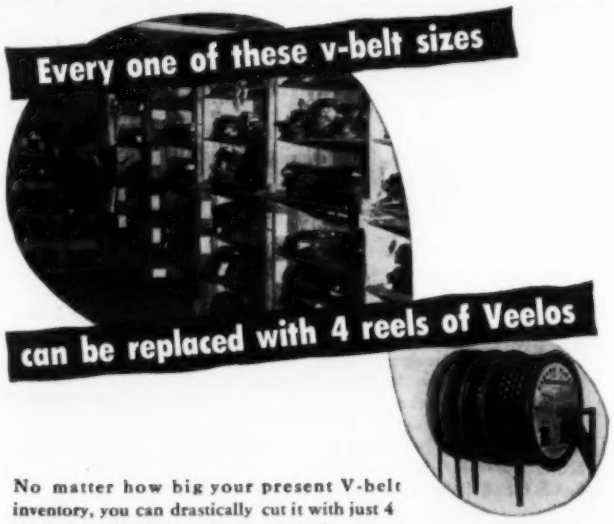
1. Present hand travelled monorail hoists.
2. Existing hand travelled crane bridges.
3. Monorail conveyor lines.
4. Open and Close garage and hangar doors.

You probably have slow, hand propelled units which the Trojan Tractor can move by power,—faster and economically. Let us know what they are; we will give you the details.

DETROIT HOIST & MACHINE CO.
8208 MORROW ST.
DETROIT 11, MICH.

▲ Mention Item NED-9416 when writing ▲

Every one of these v-belt sizes



can be replaced with 4 reels of Veelos

No matter how big your present V-belt inventory, you can drastically cut it with just 4 reels of Veelos. These handy reels give you a choice of more than 316 sizes in O, A, B and C widths. If you use only A and B sizes, just 2 reels of Veelos will provide you with a complete V-belt inventory. Any length belt is quickly uncoupled from a reel, made endless, then installed.

Veelos is made in all standard sizes . . . fits all standard grooves . . . is available in 100 foot reels. Distributors located in principal cities.

VEELOS THE LINK V-BELT

NEW VEELOS CATALOG . . . How Veelos on reels makes big V-belt inventories little is just one of the many features in the new Veelos catalog. Write for your copy today.

MANHEIM MANUFACTURING & BELTING CO.
650 Manbel St., Manheim, Pa., U. S. A.

ADJUSTABLE TO ANY LENGTH • ADAPTABLE TO ANY DRIVE

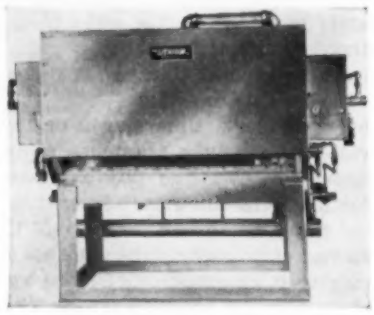
▲ Mention Item NED-9417 when writing ▲

DEW POINT MEASURING UNIT

Improvements incorporated in Alnor Dewpointer instrument provide increased dependability in measuring dew point, relative humidity, grains moisture per pound and latent heat of any noncorrosive gas. Monometer scale has been made longer to increase ease and accuracy of reading, thermopiles measure temperature inside observation chamber, and resistance thermometer tells when temperature of gas sample has stabilized to temperature of fog chamber. Indicator is available in two ranges for measuring dew point between −20° F and room temperature and from −100° to 0° F. Made by **Illinois Testing Laboratories, Inc.**, 430 N. LaSalle St., Chicago 10, Ill.

▲ Mention Item NED-9418 when writing ▲

FORGE FURNACE



Forgings can be heated free of scale in direct-fired lithium atmosphere forge furnace. Carrier gas from gas generator is passed through vaporizer tube where it mixes with vaporized lithium, and mixture is then introduced into work chamber where it provides necessary protective atmosphere. In addition, slight coating of lithium which is imparted to metal surface insures against scaling while metal is being removed from furnace to press, upsetter or hammer during hot working and during cooling.

Built for heavy constant duty, furnaces are available in standard single and double-slot and continuous types. Single-slot models range from 12-inch slot width by 8-inch hearth depth to 64-inch slot by 24-inch depth. They can be fired by oil or gas or both. Lithium atmosphere generating unit and vaporizer can be adapted to many furnaces currently in use. Made by **Lithium Co.**, 111 Sylvan Ave., Newark 4, N. J.

▲ Mention Item NED-9419 when writing ▲

DO YOU KNOW?

■ WASTAGE of steel at the foundry is reduced through new metallurgical technique called "Electric Hot Topping." This processing procedure gives high yield of sound ingot metal by preventing formation of cavities within metal during cooling from molten to solid state. This patented process is available for use under licensing arrangement from M. W. Kellogg Co., Jersey City, N. J.

▲ Mention Item NED-9420 when writing ▲

Engineered Fastenings
REG. U.S. PAT. OFF.

HOLTITE
SCREWS • BOLTS
NUTS • SPECIALS

Produced with the precision of small tools, and with strength far beyond ordinary demands, HOLTITE Engineered Fastenings will dependably safeguard your assemblies against the loosening effects of vibration and assure trouble-free, enduring service.

CONTINENTAL SCREW CO. New Bedford, Mass., U.S.A.

▲ Mention Item NED-9421 when writing ▲

DURO-CHROME

STAMINA

Another Mighty Good Reason Why They're Called
Doggone Good Tools!

There's a "feel" of reserve strength in **Duro Chrome** Hand Tools that every mechanic will recognize . . . the feel of sturdy dependability that leads to the satisfaction of a job well done. **Duro** Box Wrenches are made in a wide range of sizes to fit every job . . . to provide a dependable "third hand" for reaching those hard-to-get-at places with ease.

Duro Metal Products Co.,
2649 N. Kildare Ave., Chicago 39, Ill. 1072

DURO TOOLS (HAND TOOL DIVISION)
The Mechanic's Best Friend
OVER A BILLION BUILT SINCE 1916
ALSO MAKERS OF DURO MACHINE TOOLS

▲ Mention Item NED-9422 when writing ▲

Here's a Proved Short-Cut to Savings

5 Kennamatic tools in action, roughing a forged steel stem pinion, SAE 5140. Speed is 230 SFM, feed .027", depth of cut 3/16" . . . and the Kennamatic tools turn out 350 pieces per index, 56,000 pieces per tool!

Another typical example of time-saving Kennamatic tooling. This cast iron valve body is turned at 250 SFM, with a feed of .005", depth of cut from 1/8" to 3/16". On this job other brazed tools had to be changed 8 times per shift . . . whereas Kennamatic inserts are simply indexed twice per shift, and give four days' service before resharpening.

When the going gets tough . . . . Kennametal Tooling is the sure way to faster production at less cost

Why wait for the going to get tough?

Under the pressure of rising costs—it becomes "tougher" and "tougher" to produce at a profit, and sell at a price.

But remember that "tough" is a relative term—any job is tough if there's an easier, faster, less expensive way to do it.

Your machining operations are tough, slow, and expensive . . . unless you are using uniformly strong, hard, long-lived Kennametal coupled with the latest Kennametal improvements in carbide tool design.

Kennametal tooling keeps your machines on the job with minimum interruption—enabling you to turn out from 2 to 5 times more than steel tools on the same machine in the same time, with from 5 to 20 times longer tool life.

Use this modern tooling technique to save money in your plant—ask our district tool engineer to demonstrate.

Write for new Catalog 48.

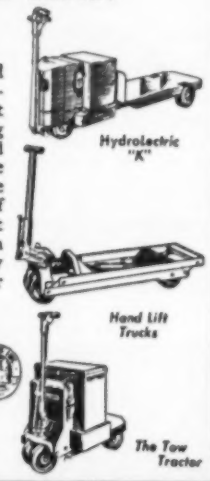
KENNAMETAL Inc. Latrobe, Pa.
MANUFACTURERS OF SUPERIOR CEMENTED CARBIDES AND CUTTING TOOLS THAT INCREASE PRODUCTION

▲ Mention Item NED-9423 when writing ▲

DON'T BE "DUNNED" BY A TRUCK!

REPAIRS AND DOWNTIME ARE COSTLY

Are "hidden costs" of parts, labor and downtime turning your truck's purchase price into just a first installment on continuing bills? Don't keep paying and paying! Lift Trucks, engineered and guaranteed by the creators of the lift truck system are proved to be the lowest costing trucks. Case histories of long, trouble-free service show that Stuebing designed Lift Trucks stay on the job . . . keep repairs and costly downtime to an amazing low. Write for Bulletin G



Engineered and Patented by W. Stuebing.

LIFT TRUCKS INCORPORATED

2425 Spring Grove Ave. Cincinnati 14, Ohio

Mention Item NED-9425 when writing

K-P *Spiral Woven Wire* CONVEYOR BELTS

Made in suitable metals and mesh sizes for conveying, material handling, processing and heat treating. Particularly well adapted to the food industries where free circulation of air and drainage are required. K-P Flextrough Belts with flanges edges prevent small parts from rolling off the belt. Side chains provided for sprocket drive. Complete special purpose conveyors designed and manufactured.

"Keeps Promises"

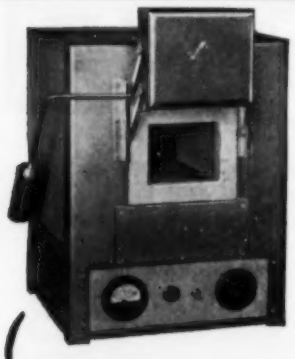
KORB-PETTIT

Wire Fabrics & Iron Works Inc. Engineers and Manufacturers

1501 North Mascher St. Philadelphia 22, Pa.

Wire Mesh, Spiral Woven Wire Conveyor Belts, Intra-Red Conveyor Dryers, Leather Finishing and Drying Machines, Industrial Wire Partitions, Machine and Window Guards, Cages, Enclosures, Grilles, etc.

Mention Item NED-9426 when writing



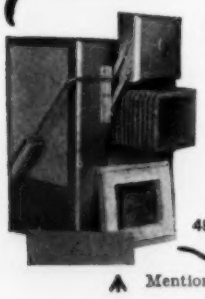
TEMCO

ELECTRIC FURNACE

Fast, Uniform Heat with Improved Model OFE

Ruggedly built to withstand hard usage and the thermal shock of fast heating, this improved TEMCO furnace features an uplifting easily operated door, the economy of thick dual insulation and easy accessibility to operating parts.

Type OFE is available in two interior sizes and two types of built-in controls. "S" models are equipped with indicating pyrometer and electrically operated input controller. By manipulation of the control knob any temperature from 350 deg. to 1900 deg. F. can be selected and held. "V" models are supplied with a fully automatic Veritron Electronic Pyrometer Controller which can be pre-set for the temperature to be maintained.



MODEL	MUFFLE SIZE	WATTS	PRICE
OFE-S-10	6" x 5" x 10"	2400	$194.00
OFE-V-10	6" x 5" x 10"	2400	280.00
OFE-S-19	6" x 5" x 19"	4500	270.00
OFE-V-19	6" x 5" x 19"	4500	356.00

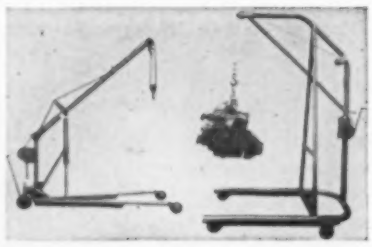
Operating temperatures:
1600 deg. F. — continuous
1900 deg. F. — intermittent

Write for complete specifications and name of nearest dealer.

THERMO ELECTRIC MFG. CO.
484-12 West Locust Street, Dubuque, Iowa

Mention Item NED-9427 when writing

PORTABLE SHOP CRANES

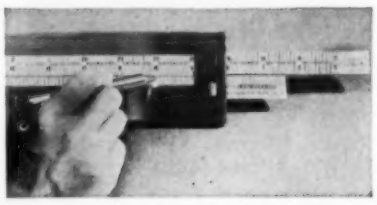


Three portable shop cranes, models 1-C, 2-C and 7-C, are available for handling motors, engines, castings, molds and other heavy items in and out of machines or on and off trucks. Crane in right of illustration shows construction features of models 1-C and 2-C, and these units are capable of handling loads weighing up to 3000 pounds at heights of 7 feet and 10 feet 8 inches respectively. Model 7-C, shown on left, has boom that can be extended to 79 inches or folded down to permit passage through 6-foot opening. This crane has maximum capacity of 1500 pounds.

Cranes employ safety winch crank. Seven turns of this crank in clockwise direction will raise loads approximately 1 foot. When worker stops crank, load is held positively in position. Made by **Grand Specialties Co.,** 3135 W. Grand Ave., Chicago 22, Ill.

Mention Item NED-9428 when writing

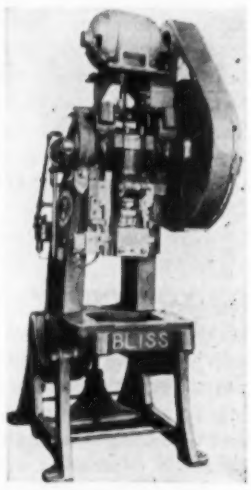
WORKERS' TIME CALCULATOR



Based on slide rule principle, Time-Tab two-ruler calculator is designed to speed and make accurate the compilation of workers' payroll time, whether it is recorded by time clock, time sheets or timekeeper. Rules are divided into hourly segments representing 24-hour day to allow for overtime pay reckoning. Hours are divided further into minutes. After top ruler is moved for all 'in' times and lower for all 'out' times by means of stylus, day's net working time appears in answer window. Calculator is constructed of wood and aluminum and is supplied in small case. Made by **Time-Tab, Inc.,** 2525 Fruitland Ave., Los Angeles 11, Calif.

Mention Item NED-9429 when writing

INCLINABLE PRESS



Pneumatic friction clutch and brake can now be supplied on standard Bliss flywheel type inclinable presses as well as on smaller geared sizes. For certain applications, this clutch offers advantage of safety because press can be stopped at any point in stroke. Inching action is possible to facilitate setting up of some types of dies, and by reversing press, punch can be backed away from die without completing stroke. Clutch was used heretofore only on large geared presses. Made by **E. W. Bliss Co.,** Dept. NED, 450 Amsterdam Ave., Detroit 2, Mich.

Mention Item NED-9430 when writing

Better Parts Selection at Much Lower Costs . . .

EXACT WEIGHT Shadowgraph is a simple even balance scale which substitutes a light ray for mechanical indication. A revolutionary change in modern industrial weighing.

In the past little attention was attached to the actual cost involved in parts selection as an operation. The theory was that good parts selection paid its way by cutting costs in general mass production. Today production men have learned that further savings can be made and costs lowered in the parts selection operation itself. This has been accomplished by precision weighing which eliminates time consuming hand operations which mount costs. EXACT WEIGHT Scales fitted to the operation now select parts accurately and faster, thereby lowering costs materially. No large parts selection operation is without this equipment today. If your operations are costing too much now write for full details covering models to solve your problem.

INDUSTRIAL PRECISION *Exact Weight Scales*

THE EXACT WEIGHT SCALE COMPANY

129 W. Fifth Ave., Columbus 12, Ohio

783 Yonge St., Toronto 5, Canada

Mention Item NED-9431 when writing

*Ornametl** . . . beautiful woods that you can stamp, press, or roll to shape as easily as metal.

Here is a material to challenge the imagination of the creative designer. Beautiful, modern, sales appealing products with a luxurious wood surface can be fabricated from Ornametl with the same ease and speed that has long been associated only with metal fabrication. Ornametl offers unusual opportunity for building new attractiveness into office furniture . . . passenger car bodies and interiors . . . house trailer interiors . . . bus interiors . . and many other products. Write today for a free sample.

*T.M. Reg.

® HASKELITE MANUFACTURING CORP.

Dept. ED Grand Rapids 2, Mich.

New York Cleveland Detroit St. Louis Los Angeles Chicago Boston Philadelphia

In Canada: Railway & Power Engineering Corp., Ltd.

Mention Item NED-9432 when writing

Save money, space, weight with SPEEDAIRE

SPEEDAIRE is Cleveland's new fan-cooled, worm-gear speed reducer. Because it is fan-cooled, Speedaire will do more work—will deliver up to *double the horsepower* of standard worm units of equal frame size. For full description, rating tables, etc., send for Catalog 300. The Cleveland Worm & Gear Company, 3283 East 80th Street, Cleveland, Ohio.

CLEVELAND Worm Gear *Speed Reducers*

Mention Item NED-9433 when writing

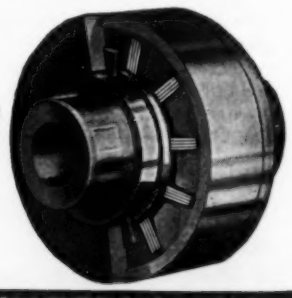
KUSHION-TORK

WHAT IT WILL DO FOR YOU

The Cushion Torque of Kanti-Lever Couplings absorbs the hammer blows of sudden or reversing loads and dampens the torsional and radial vibration that cause wear, fatigue and sometimes failure of Motors, Speed Reducers, Ball Bearings, and productive machinery. No other coupling is like the Kanti-Lever: It has a circular series of laminated Cantilevers of 200,000 lb. steel, operating in slots, the tapered sides of which automatically stiffen the Cantilevers under increased overloads. Special end-play up to four inches is possible without end thrust. The outer periphery of the Kanti-Lever is available as a brake drum for quick-stopping or reversing machinery. Send for Bulletin No. 28-D.

Kanti-Lever Couplings

4,000,000 h. p. in Use



BROWN ENGINEERING CO.

129 NORTH 3RD ST. READING, PENNA.

Mention Item NED-9434 when writing

No Power Take-off Needed!

with Motor Driven Rotary Geared Pumps

THESE PUMPS can be mounted in almost any convenient location on machines they serve—horizontally or vertically. Canopy to protect motor from dirt and chips available for vertical mounting.

Capacities up to 18 G.P.M.; pressures to 200 lbs. per sq. inch (100 lbs. continuous service). Motors to 1½ H.P.

Helical gears in pumps. Speed reduction units have helical gears with motors up to ½ H.P. ¾ H.P. and larger have herringbone gears. Optional gear ratios of 600 R.P.M. or 900 R.P.M. Write for complete Pump Catalog. Brown & Sharpe Mfg. Co., Providence 1, R. I., U. S. A.

GEARED — VANE — CENTRIFUGAL — MOTOR DRIVEN

BROWN & SHARPE PUMPS

▲ Mention Item NED-9435 when writing ▲

Barber-Greene

The B-G 661 Gooseneck makes it possible to mechanize all coal unloading, stockpiling and loading operations—to speed up and effectively cut the cost of all three. This self-propelled machine combines Truck Loader with power driven Car Unloader and Stacker to enable one man to handle all basic coal-moving work around the yard or plant. To learn more about the savings a 661 Gooseneck can mean to you fill in and send for new literature. Address Barber-Greene Co., Aurora, Ill.

With a 661 Gooseneck and Unloader-Stacker attachments, you can:

- *Unload all sizes of coal from car in 90 minutes*
- *Load trucks at 1½ tons per minute*
- *Screen coal with vibrating screen*
- *Stockpile to elevation of 20 ft.*
- *Load largest trucks, regardless of sideboards*
- *Move equipment under its own power*

BARBER-GREENE COMPANY, AURORA, ILLINOIS

Constant flow Equipment

▲ Mention Item NED-9436 when writing ▲

FLUORESCENT LUMINAIRE

Employing four 40-watt fluorescent lamps, Sentinel 4-foot luminaire provides effective lighting in rooms or corridors where single mounting is desirable. Because it is similar in design to Grenadier II and IV, it can be used to match installations of these continuously mounted fixtures. Metal parts have satin finish, and side panels are translucent white plastic. Lamps can be replaced either through top or from bottom by lowering louvers which are hung from studs. Light distribution pattern can be controlled by addition of either solid topplate reflectors or slotted reflectors, which distribute 8 per cent of light upward. Both on-ceiling and stem types can be supplied. Made by **F. W. Wakefield Brass Co.**, Wakefield Park, Vermilion, O.

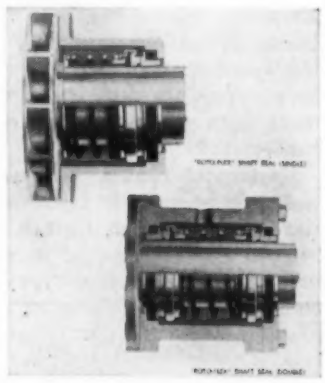
▲ Mention Item NED-9437 when writing ▲

OVEN CHAIN LUBRICANT

Recommended for use on oven chains where there are existing carbon and varnish conditions, Gibraltar special oven oil No. 1 is light in density and will penetrate through roll pins. Resulting action causes carbon and varnish deposits to drop from chain. Oven oil No. 2 is somewhat heavier in density and is recommended for use on new and clean chains or after No. 1 grade has been used for some time and chain is free of deposits. Oils provide adequate lubrication and serve to eliminate formation of deposits. Made by **Hood Refining Co.**, 232 N. Hamilton Ave., Greensburg, Pa.

▲ Mention Item NED-9438 when writing ▲

ROTATING SHAFT SEAL



Developed for water and oil pumps, fuel oil and gasoline pumps, water circulators, refrigeration compressors, speed reducers, as well as other industrial applications, this Roto-Flex rotating shaft seal prevents leakage of liquids or gases along shaft. Rotating member is integral unit and cannot come apart. It is held by compression spring against fixed surface or stationary seal. Operating conditions of application for seal determine amount of spring pressure necessary to provide positive sealing and determine materials used for lapped wearing surfaces and other component parts.

Double Roto-Flex units consisting of two rotating seals mounted on opposite ends of compression rings are available also. They are designed for installations where liquid being sealed cannot act as lubricant or coolant, and separate liquid supply is admitted into seal chamber. Made by **Gits Bros. Mfg. Co.**, 1846 Kilbourn Ave., Chicago 23, Ill.

▲ Mention Item NED-9439 when writing ▲

Who knows most about keeping lubricants in and contaminants out of BALL BEARINGS?

Wouldn't that logically be the outfit first to work out a practical grease shield and that's been pioneering important improvements in seals and shields ever since?

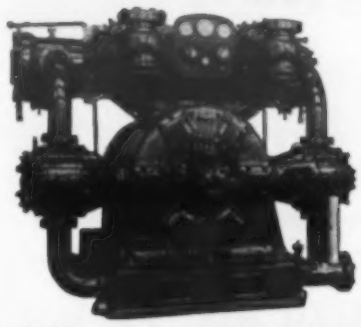
Whether you want a simple slinger type shield or a precision labyrinth of steel plates like the Mechani-Seal or an economical, efficient felt seal or a Plya-Seal that can fend off steam under pressure, brine, oil, dust and most anything industry can throw at a bearing . . . Fafnir makes every type and combination of types. The Fafnir Bearing Company, New Britain, Conn.

FAFNIR BALL BEARINGS

MOST COMPLETE LINE IN AMERICA

▲ Mention Item NED-9440 when writing ▲

High Air Capacity . . . Unmatched In Low Air Cost



JOY WN-114 COMPRESSOR

The WN-114 is a four-cylinder, two-stage compressor featuring JOY "Dual-Cushion" Valves for top efficiency. Single units (above) produce from 1092 to 3656 CFM, twin units up to 7312 CFM. The JOY line of stationary compressors, starting at 81 CFM, includes the most modern machines available for either centralized or decentralized air supply. *Write for Bulletins.*

Consult a Joy Engineer

W&D 12141

JOY MANUFACTURING CO.
General Offices: Henry W. Oliver Building
Pittsburgh 22, PA.
IN CANADA: JOY-SULLIVAN OF CANADA, LIMITED
GALT, ONTARIO

▲ Mention Item NED-9441 when writing ▲

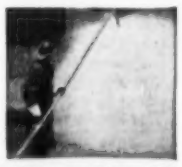
NEW ROCKWOOD TRIPLE-ACTION TYPE SG-48 WaterFOG NOZZLE

GIVES NEW FIRE CONTROLLING AND EXTINGUISHING POWER TO ORDINARY WATER ALREADY IN YOUR PLANT.

DISCHARGES . . .

1. High Velocity WaterFOG

2. Straight Stream



3. Low Velocity WaterFOG from extension applicator

The new Rockwood type SG-48 WaterFOG Nozzles are made of special aluminum alloy and are designed and engineered to fight fires in flammable liquids and ordinary combustibles. They will protect your firemen and increase their efficiency when fighting fires in your plant.

Rockwood WaterFOG Nozzles will operate efficiently on 50 p.s.i. at the Nozzle and are available in ¾", 1", 1½" and 2½" sizes for service on fire hose lines.

Write for bulletin C-501R.

ROCKWOOD SPRINKLER CO.
44 HARLOW STREET WORCESTER 5, MASS.

▲ Mention Item NED-9442 when writing ▲

STAINLESS TUBING DATA

on
- Velocity Constants
- Mass Velocity Constants
- Cross Sectional Areas of I. D. and O. D.
- Sq. Ft. Internal and External Surface Per Lineal Ft.
- Physical Properties
- Available Sizes

Return the coupon today for your Carpenter Stainless Tubing Slide Chart.

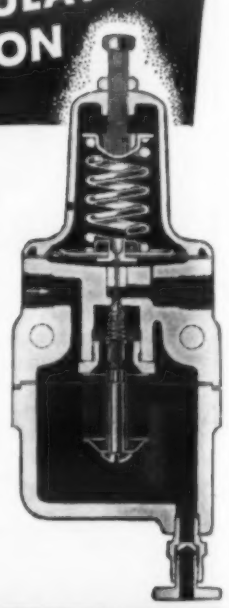
THE CARPENTER STEEL COMPANY
Alloy Tube Division • 118 Springfield Rd., Union, N. J.

NAME_____ TITLE_____
(Please Print)
COMPANY_____
(Firm Name Must Be Given)
ADDRESS_____
CITY_____ ZONE_____ STATE_____

▲ Mention Item NED-9443 when writing ▲

FISHER TYPE 67FR

Small Volume FILTER-REGULATOR COMBINATION



FOR ALL AIR OPERATED DEVICES

Designed to furnish industry a small volume air or gas regulator that would be (1) economical; (2) efficient in regulation; (3) free from vibration and chatter and have capacities up to 6 CFM. Particularly adapted to instrument air service, supplying 20 lbs. operating medium pressure to instruments and pilot operated regulators. Drip section equally efficient in horizontal or vertical position.

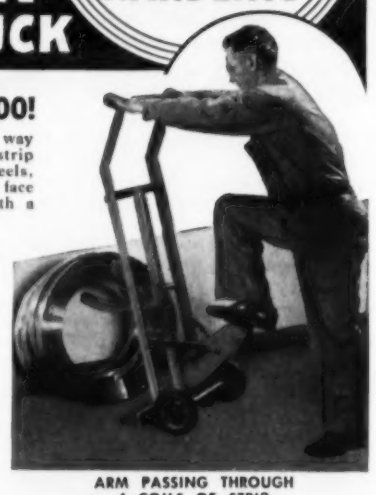
Maximum inlet pressure: 250 PSI at 150° F.

Reduced pressure ranges: 5 to 35 lbs.; 30 to 60 lbs.; 55 to 100 lbs. ¼" inlet and outlet, screwed connections.

FISHER GOVERNOR COMPANY
MARSHALLTOWN, IOWA

▲ Mention Item NED-9444 when writing ▲

Speed up COIL HANDLING with a SABIN COIL TRUCK



A LABOR SAVER, TOO!

A new, easier and cheaper way of handling wire coils, strip coils, box strapping, wheels, tires, lathe chucks or face plates—in fact anything with a hole through it.

An adjustable arm passes through hole, then an easy pull back on truck handle picks up article. Load balances over truck wheels for easy moving.

WRITE FOR BULLETIN showing complete line of Sabin One-Man Trucks.

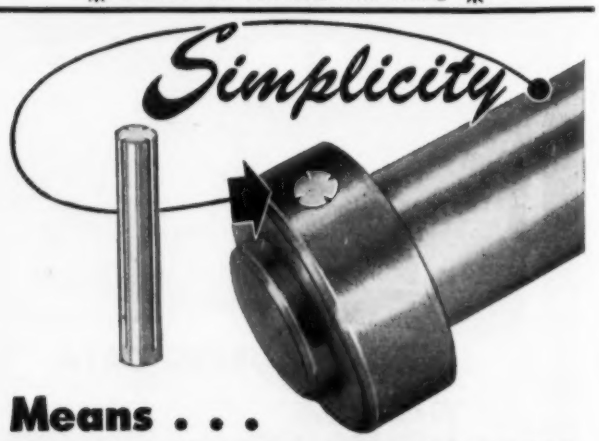
The Sabin Machine Co.
6536 Carnegie Ave.
Cleveland 3, Ohio

ARM PASSING THROUGH 4 COILS OF STRIP

Other Sabin Trucks DRUM and BARREL TRUCKS, TOTE PAN, BOX, CARBOY, KEG TRUCKS.

▲ Mention Item NED-9445 when writing ▲

Simplicity



Means . . . PRODUCTION ECONOMY

Assembly of parts like this with DRIV-LOK Pins is simple—fast—more economical. Just drill through collar and shaft and drive in the pin. No reaming or staking necessary. Vibration proof. DRIV-LOK Pins are used in many industries for countless applications. Made in many types and sizes to fit your needs. Write for CATALOG showing sizes and applications.

DRIV-LOK PIN COMPANY
717 Chauncey Street, Sycamore, Illinois

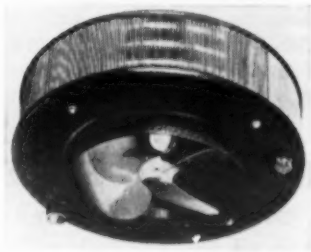
▲ Mention Item NED-9446 when writing ▲

DUAL THERMOMETER

Both indoor and outdoor temperatures are clearly indicated on single dial of Duo-Temp thermometer (*See Dec. '47 NED*) which has been redesigned. Molded plastic case of neutral platinum-beige color blends with any decorative scheme, and on dial, gold characters contrast sharply with dubonnet background. Upper (outdoor) scale reads from −30° to 110° F, and lower (indoor) scale indicates from 50° to 90° F. Speedometer type pointers clearly indicate reading. Armored capillary tubing which connects instrument with outdoor bulb is small enough to pass between sash and casing of window. Made by **Jas. P. Marsh Corp.**, Dept. 122-R, 3501 W. Howard St., Skokie, Ill.

▲ Mention Item NED-9447 when writing ▲

UNIT HEATER



Two new units of horizontal and vertical design have been added to standard line of U. S. unit heaters. Both models are suited for use in factories, commercial buildings and offices, and they are adaptable for either steam or hot water heating systems. Units provide uniform heating, have large broad propeller fans which furnish maximum air movement with minimum noise and have motors mounted in rubber.

Horizontal heater, designed for mounting along side walls or suspended from room ceiling, is available in sixteen sizes which furnish heat output from 24,000 to 240,000 British thermal units per hour. Vertical model, illustrated, blows air downward and is designed especially for ceiling mounting. It is available in 28 sizes providing heat output from 37,200 to 492,000 British thermal units per hour. Made by **United States Radiator Corp.**, 300 Buhl Bldg., Detroit, Mich.

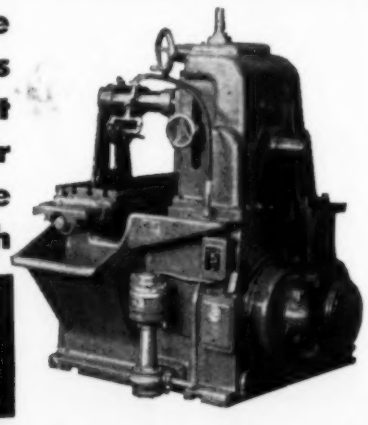
▲ Mention Item NED-9448 when writing ▲

DO YOU KNOW?

■ PROBLEMS of motion are solved just as fast as the motion happens with new electronic 'slide rule.' This electric 'brain' can be plugged into any wall socket, is 2 feet square and contains 100 radio tubes. Operator 'sets in' known constants in equation by plugging in required circuits. Answers are printed on tape by recording pen. Developed for U. S. Air Force by Goodyear Aircraft Corp., Akron, O.

▲ Mention Item NED-9449 when writing ▲

experience shows you get better performance with



RUTHMAN GUSHER COOLANT PUMPS

Oversized pre-lubricated bearings, totally enclosed motor, split second control of coolants, electronically balanced rotating assembly, no metal to metal contact are only a few of the unique advantages that Ruthman Gusher Coolant Pumps offer. You will get long life, better performance with Ruthman Gusher Coolant Pumps on your machines.

Illustrated above is a KEARNEY & TRECKER Simplex Milling Machine equipped with Model 11022 Long, ¼ HP Ruthman Gusher Pump.

THE RUTHMAN MACHINERY CO.
1823 Reading Road Cincinnati 2, Ohio

▲ Mention Item NED-9450 when writing ▲

DARTS are leak-proof because of the ground ball joint

BECAUSE OF THE TRUE BALL JOINT . . . spherically-ground to form wide, true-bearing surfaces . . . Darts are tight without jamming. Seats remain unscarred and true . . . ready for repeat use.

BECAUSE OF THE TWO BRONZE SEATS a Dart resists pitting, electrolysis and corrosion . . . gives years of leak-proof service.

BECAUSE OF THE HEAVY SHOULDERS a Dart shrugs off wrench abuse through dozens of installations.

BECAUSE OF THE TOUGH BODY . . . made of practically indestructible air-refined malleable iron . . . a Dart has highest resistance to stress and stretching.

These extra-quality features explain why Darts are the lifetime union . . . why Darts can be used again and again.

E. M. DART MANUFACTURING CO.
Providence 5, Rhode Island

▲ Mention Item NED-9451 when writing ▲

Eliminate time-consuming manual solder operations in your assembly processes. Pre-formed rings, washers, discs, pellets, squares, etc., complete with flux, save time, trim labor costs, insure cleaner, more uniform, sturdier bonds. We meet your specifications in the widest variety of solder alloys. Consult with us on any solder or brazing problem.

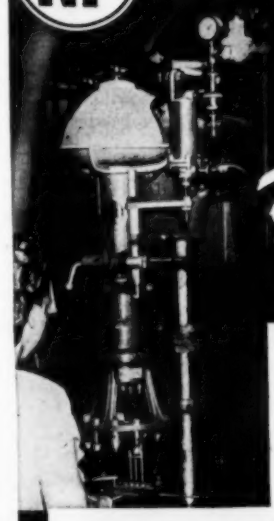
(Literature on Request).

Soldering Specialties
Dept. A, Summit, N. J.

▲ Mention Item NED-9452 when writing ▲

NP DRILL PRESS KIT

converts your drill presses to Airpower for Faster, lower-cost production drilling



Steps up production—and quality! Pre-set pressures give automatic control, enabling inexperienced operators to match the skill of experts. Pressure on drill is adjustable to suit drill size and stock...permits maximum safe pressure and feed. Less drill breakage and sharpening. Foot Control Valve leaves operator's hands free...faster loading and unloading. Kit is readily installed by your own mechanics. *Write for Bulletin DC-28.*

NATIONAL PNEUMATIC CO.
Industrial Division • Rahway, N. J.

Pneumatic Specialists Since 1904

▲ Mention Item NED-9453 when writing ▲

ALUMINUM LADDER COMPANY, pioneer in the development of light weight industrial ladders, announces a complete new line of MAGNESIUM LADDERS, comparable in size, service and price to aluminum ladders offered in the past.

Careful engineering and the experience of 18 years in light-weight ladder construction make these new magnesium ladders altogether worthy of the

ORIGINAL MANUFACTURERS OF ALUMINUM LADDERS

Aluminum Ladder Company
346 CARBIS STREET
WORTHINGTON, PA.

Mention Item NED-9454 when writing

DESTROYS BAD ODORS keeps workers satisfied

AMAZING NEW

amOZONer

GENERATES OZONE • FRESHENS ATMOSPHERE IN MILLS • FACTORIES • OTHER INDUSTRIAL PLANTS

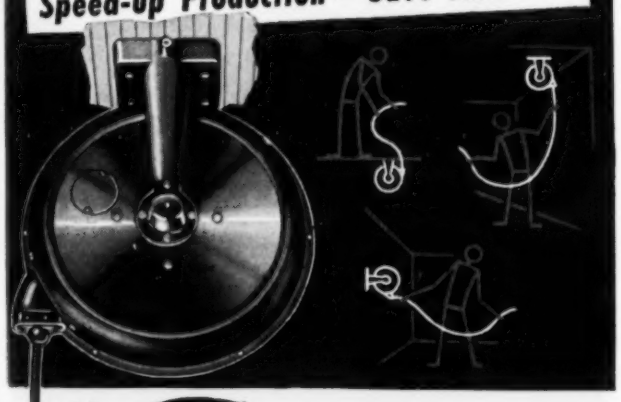
By greatly improving working conditions this new system helps to promote greater efficiency among workmen. Installed 7 feet off the ground the "amOZONer" clears away bad air and objectionable odors from an area up to 6,000 square feet.

Easy to Install
Economical to Operate

For detailed information write:
American Associates, Inc.
1730 Fairmount Avenue
Philadelphia 30, Pa.

Mention Item NED-9455 when writing

Cut Air-Hose Costs — Prevent Accidents
Speed-up Production — Save Time . . .



with **CHAMPION AIR-HOSE REELS**
FOR CEILINGS—WALLS AND FLOORS

Champion Air-Hose Reels more than pay for themselves in the hose they SAVE. Champion Reels keep hose *off-the-floor,* eliminate the danger of tripping. Air-hose is always convenient to operator . . . a time saver that speeds-up production. Stays put at desired length—a slight pull rewinds hose at governed speed. Fully enclosed reel housing with swivel or stationary mounting. Furnished with 30 or 35 foot hose. Write TODAY for complete data sheet.

2516

CHAMPION PNEUMATIC MACHINERY CO.
8180 SOUTH CHICAGO AVENUE • CHICAGO 17, ILLINOIS

Mention Item NED-9456 when writing

NEW *Processes* AND *Materials*

WATERLESS HAND CLEANER

Hands can be thoroughly and quickly cleaned by means of Little Doc Disolvit waterless cleaner. It removes grease, dirt, paint, rubber cement, lipstick, tar, asphalt, shellac, carbon, tinners' dope, buffing compound and other similar substances without irritating the skin. Cleaner is first rubbed on hands and then wiped off with dry cloth. Approximately one teaspoonful is sufficient for single application. Cleaner is available in pints, quarts, gallons and five gallons. Made by **Schaffner Industries, Inc.,** Herron Ave., Pittsburgh 2, Pa.

Mention Item NED-9457 when writing

TRAFFIC PAINT

Quick drying, long wearing Oncrete traffic paint is intended for marking factory aisle border lines; pull-out and storage areas; danger zones around docks and pits; and warning symbols at blind corners, cross-overs, sharp intersections and entrances to passageways. It can be used also for marking fire fighting equipment locations, for tracing pipes, and to indicate parking lines, shipping zones and traffic lanes. Paint can be sprayed on easily, and at temperature of 75° F, it dries in approximately 5 minutes. It is available in yellow, white and black; and other colors can be developed upon request. Made by **Lowebco, Inc.,** Dept. NED, 1525 E. 53rd St., Chicago 15, Ill.

Mention Item NED-9458 when writing

PREFORMED PIPE INSULATION

Applicable for use in petroleum, chemical processing and allied fields where exact temperature control is required, Foamglas preformed pipe-fitting covers are available in all sizes for ells, tees, unions, valves, elbows and flange covers. Composed of glass fibers, they retain insulating efficiency permanently; are not affected by humidity; and are waterproof, vaporproof, fire retardant and highly resistant to fumes, acids, and many other substances. Covers can be used through temperature range from −200° to 800° F. Made by **Pittsburgh Corning Corp.,** 632 Duquesne Way, Pittsburgh 22, Pa.

Mention Item NED-9459 when writing

MATERIALS HANDLING EQUIPMENT TO FIT YOUR SPECIFIC NEEDS

FAB-WELD will engineer, design and build special welded steel equipment to achieve for you the greatest saving in time, labor, space and protection of your products in transit. Representatives in all principal cities. Address our Materials Handling Division for full details.

FAB-WELD CORPORATION
MEMBER
SALMON & PICKWICK • PHILADELPHIA 34, PA.

Mention Item NED-9460 when writing

Gets Rid of "Routine Headaches"

SEE YOUR CLASSIFIED PHONE BOOK under "Intercommunication" for your local AMPLICALL specialist, or write us direct

At the touch of a button, AMPLICALL provides instant speaking contact within and between all departments of your business. Puts an end to wasteful delays and costly confusion in plant and office routine. No more weary walking or waiting—no more jammed switchboards—no need for anyone to leave his desk to obtain or issue information. It's a revelation to learn how modern AMPLICALL Electronic Communication can benefit *your* business. Get the full details today!

Electronics is our business
SOUND TELEVISION **Rauland** INTER-COMMUNICATION
THE RAULAND CORP. • 4255 N. KNOX AVE., CHICAGO 41, ILL.

Mention Item NED-9461 when writing

FASTEN FASTER with American Phillips Screws . . . the way plywood panels are fastened to trailer frames . . . with power drivers. *One man takes only 32 minutes to drive 522 screws!* That's 50% faster than slotted screws, with half the labor. And there are no corners too close . . . no angles too awkward. No costly accidents to workers or their work.

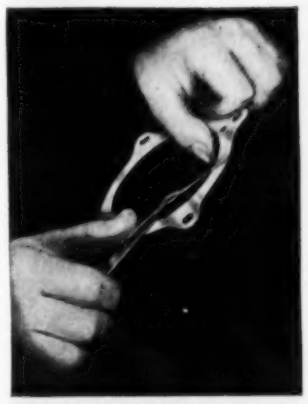
SELL FASTER . . . Buyers of *all* types of products are learning to recognize this "high sign" of quality construction . . . the American Phillips Screw with the universal cross-recess. Just tell them the whole story of American Phillips strength and vibration-resistance . . . and watch sales pick up speed! Write.

AMERICAN SCREW COMPANY, PROVIDENCE 1, R. I.
Chicago 11: 389 E. Illinois St. Detroit 2: 303 Stephenson Building

AMERICAN PHILLIPS *Screws*

Mention Item NED-9462 when writing

LAMINUM* SHIMS GIVE THE FULL SAVINGS OF SHIM DESIGN!



PRECISION ADJUSTMENTS by simply peeling laminations. No grinding, miking, filing. Machining tolerances are greatly increased because the shim provides for exact fit and takeup.

AT-THE-JOB ADJUSTMENTS. No need for standby lathe or operator. The only tool required is a jackknife to peel off a .002" or .003" lamination.

Send today for chart illustrating 46 money-saving, time-saving applications, detailed specifications, sample of LAMINUM.

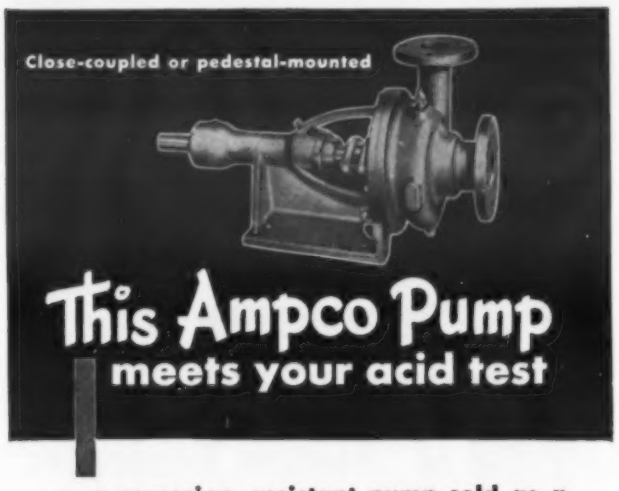
*Laminum Shims (Reg. U. S. Pat. Off.) are solidly bonded laminations of .002 or .003 inch precision gauge brass or steel with a microscopic layer of metallic binder. Cut to your exact blueprint specifications.

LAMINUM
THE SOLID SHIM THAT *peels* FOR ADJUSTMENT

LAMINATED SHIM COMPANY, Inc.
2312 Union Street, Glenbrook, Conn.

SHIMS • SHIM STOCK • STAMPINGS • AN-COR-LOX NUTS

Mention Item NED-9463 when writing



— a corrosion-resistant pump sold as a standard model without a price premium

You don't have to pay extra for special production to get a corrosion-resistant pump. Ampco's aluminum bronze centrifugal pump is a standard model—at standard-model prices.

With this new pump, you can cut the cost of original equipment, reduce replacement frequency, and be sure of efficient handling of your corrosive and erosive thin liquids. All passages are designed for smooth, quiet flow. Grades of aluminum bronze are varied to give maximum efficiency at each point. Operation in a 500° F ambient does not change its physical properties.

See your nearby Ampco engineer for details. Write for latest bulletins today.

P-26B

Ampco Metal, Inc.
Dept. NE-12 • Milwaukee 4, Wisconsin

AMPCO®

Mention Item NED-9466 when writing

If you're looking for "PRODUCTION DIVIDENDS"

HUB HIGH SPEED POWER PRESSES

NEW HIGH SPEED fully automatic press with self contained stock dispenser.

- Feed 0-8"
- Stock Straightener
- Variable Speeds—60-240 strokes per minute
- Stock Dispenser
- Capacities: 4½ to 27 ton Manual or Automatic

OBI Demonstrators now available at 25 DO ALL offices throughout the U. S., Mexico and Canada. Investigate the money saving discounts on these machines at your nearest DO ALL office.

William F. Brewer MACHINE COMPANY

75 Laurel St., Hartford 6, Conn.

Mention Item NED-9467 when writing

AVAILABLE NOW **VEMCO DRAFTING MACHINES**

THESE advanced VEMCO Drafting Machines, available at your dealer NOW for immediate delivery, incorporate four outstanding features—

1. VEMCO'S exclusive *articulated arms* permit raising the drafting head—even over large objects on the board—yet keep the scales always flat.
2. Simple tightening device produces proper hand tension. Streamlined guards are installed on bands to keep out dust and dirt.
3. Convenient thumb-action indexing for each 15° in entire circle.
4. All VEMCO machines are finished in a striking blue-green metallic color—to minimize eye strain, minimize dust and add attractive color to your entire drawing board.

Ask your VEMCO dealer for a demonstration today or write us for catalog of VEMCO drafting machines and drawing instruments.

V. & E. MANUFACTURING CO.
PASADENA 20, CALIF.

Mention Item NED-9468 when writing

New Processes & Materials

INDUSTRIAL HAND CLEANER

Packaged in handy 5-pound containers for easy dispensing, Magnus hand cleaner is intended for use in industrial plants and other establishments having wall-mounted soap dispensers in washrooms. This cleaner, which has been available previously in smaller and larger quantities, offers safe, easy way of removing grease, paint, pitch and other difficult-to-remove soil and stains from hands. Made by **Magnus Chemical Co.,** Dept. NED, 13 South St., Garwood, N. J.

Mention Item NED-9469 when writing

RESIN BASE FLOOR ENAMEL

In addition to affording high wear resistance, Vinyl resin base floor enamel is impervious to greases, oils, brine, alcohols, petroleum solvents, soaps, alkalies and most acids. It has excellent resistance to corrosive fumes and adheres to wood, concrete and metal. Easily applied with brush or spray, it forms tough smooth surface that will not crack or peel off. Complete range of colors is available. Made by **Benjamin Foster Co.,** Girard & Merion Aves., Philadelphia 31, Pa.

Mention Item NED-9470 when writing

INDUSTRIAL INK

Suitable for use on nonporous surfaces such as metal, glass, rubber and plastics, Semi-Opaque industrial ink can be applied with Flo-master Fountnbrush, metal stamps or stencil brushes. It is available in black, white, silver, yellow, red, blue, green, orange and brown. Colors can be blended. This fast drying, long wearing ink is resistant to water, acids and alkalies. Samples are available without charge from **Cushman & Denison Mfg. Co.,** Dept. NED, 135 W. 23rd St., New York 11, N. Y.

Mention Item NED-9471 when writing

INSULATING TUBING

Tough, flexible Varglas Permafil electrical insulating tubing has excellent electrical performance characteristics even after severe bending, wrapping, twisting, and normal and accelerated aging tests. In addition, tubing meets all electrical standards, sizings, wall thicknesses and diameter dimensionals of standard varnish tubings. It will withstand several hundred hours at 105 to 110° C and more than 100 hours at 125° C. Tubing can be after-treated in baking and varnish operations. Rate of burning, oil immersion and other requirements of standard VTA and ASTM specifications are met or exceeded. Made by **Varflex Corp.,** 310 N. Jay St., Rome, N. Y.

Mention Item NED-9472 when writing

SUPERFINISHED I.D.'s of UNIVERSAL DRILL BUSHINGS wear longer — save you money

UNIVERSAL ENGINEERING CO., FRANKENMUTH 5, MICH.

Mention Item NED-9473 when writing

END TRAFFIC TROUBLE SPOTS

Where the traffic's heaviest . . . install Bird Rubberlike Runner. It's safe . . . lies flat without cementing, won't buckle . . . and it's non-skid, wet or dry. Cuts and nicks are resealed by passing traffic . . . floors are easier to clean and always safe for traffic.

Years of rugged wear, yet this patented thermoplastic costs less than 7c a square foot . . . the perfect floor runner for traffic trouble spots everywhere. In rolls 27" x 100', 36" x 75'. Order from distributor, or write for *free* sample. Bird & Son, inc., 81 Mill St., East Walpole, Mass.

BIRD RUBBERLIKE® Runner BIRD & SON inc. Established 1795

PATENTED NON-RUBBER CONSTRUCTION

Mention Item NED-9474 when writing

Standard X WASHERS

The Standard X Washer is an efficient, economical locking device. It provides quick, positive assembly . . . 360° closure to support greater thrust load . . . fast, easy removal . . . simplified service or repair. No vibration can shake it loose.

Standard X Washers are available for pin diameters from 7/32" to 17/32". For complete specifications write for Bulletin 26.

Standard LOCKNUT & LOCKWASHER, INC.
311 N. CAPITOL AVE., INDIANAPOLIS 4, INDIANA

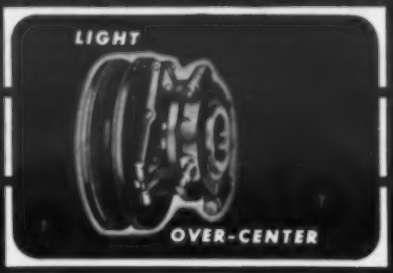
Mention Item NED-9475 when writing

SPRACO NOZZLES

Write for NOZZLE CATALOG *to*
SPRAY ENGINEERING CO.
106 CENTRAL STREET • SOMERVILLE 45, MASS.

Mention Item NED-9476 when writing

FUNCTION FITTED

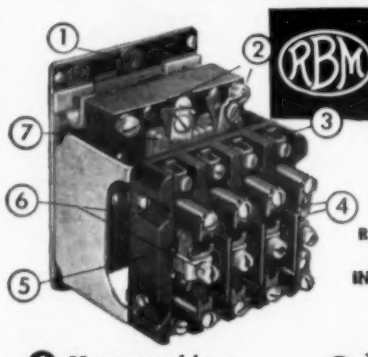


ROCKFORD CLUTCHES

Design and build your products to suit their functional needs — and let us build clutches best suited to control and transmit their power. Given the operating essentials of your products — we produce clutches to fit the specific needs of your product. Specializing in clutch building, our experience covers over thirty years of clutch research, design, production and field service in hundreds of industries. Write for our latest bulletin showing typical installations of ROCKFORD CLUTCHES and POWER TAKE-OFFS.

ROCKFORD CLUTCH DIVISION
BORG-WARNER
312 Catherine Street, Rockford, Illinois

Mention Item NED-9477 when writing



RBM INDUSTRIAL CONTACTORS

2 TO 8 POLE
600 VOLT A. C.
10—15 AMPERE SIZES
REVERSING—NON-REVERSING TYPES
INTERCHANGEABLE CONTACTS

1. Heavy steel base.
2. Coil readily replaced by removing 2 heavy screws holding E-shaped magnet frame.
3. Accessible solderless type terminals are conveniently located. All line terminals at top; load terminals at bottom.
4. Any pole can be changed from normally open to normally closed, or vice-versa, without additional parts.
5. Melamine stationary contact block and movable contact carrier.
6. Stationary and movable contacts can be readily replaced with use of screw driver only and without removing wiring.
7. Vacuum impregnated magnet coil designed for continuous 50/60 cycle service.

For descriptive bulletin No. 600 write Dept. G-12.

R-B-M DIV., ESSEX WIRE CORP.
LOGANSPORT, INDIANA

Mention Item NED-9478 when writing

Speed Burring Jobs with OILSTONE FILES

Grinding Wheel Grit . . . and ALL File

Whether it be the skillful stoning of the countless teeth in these giant reduction gears or single-stroke passes on thousands of small machined parts — burring is a production operation — its cost, a production cost.
Factory oil-filled for greater chip clearance, India Oilstone files offer industry a complete range of over a hundred standard stock items with a finish spread including coarse, medium and fine grits. Ask your distributor or write for booklet, "Oilstone Files."

Photo courtesy of Westinghouse Electric Corp.

BEHR-MANNING · TROY, N.Y.

Mention Item NED-9479 when writing

New Processes & Materials

MECHANICAL PLATING

Eliminating need for electrical current for plating process, Lustralloy leaves bright, high quality finish that is resistant to tarnish and corrosion. It can be applied to any base metal with excellent bond. Through use of heat treatment at relatively low temperature, alloy finish can be hardened as high as VPN 900 with good ductility. Applications of this alloy are almost limitless, especially in products requiring hard and wear resisting surfaces on stainless steel or nonferrous alloy parts. Developed by **Lustralloy Sales Corp.**, 10 E. 52nd St., New York 22, N. Y.

Mention Item NED-9480 when writing

PIPE MENDING CEMENT

Furnished in stick form, Krak-Stik pipe mending cement is positive seal for repairing split soil pipes, sandholes, cracked pipes, and gaskets. Even pinholes can be effectively sealed. Leaks are repaired while system is handling fluids under pressure in such lines as water, gas, acid and brine. Only operation required is rubbing of stick over crack or leak in pipes, vats or other liquid containers. Made by **Lake Chemical Co.**, 621 N. Western Ave., Chicago 12, Ill.

Mention Item NED-9481 when writing

HEAT-RESISTANT SEALER

Suitable for filleting or caulking, Stabond C-875 resin based material retains its adhesive and sealing properties at temperatures up to 500° F. Adhesion to aluminum, brass, tin, steel, Micarta, Lucite, Fiberglas, wool and stainless steel is satisfactory between −65° and 500° F.

Consistency of material can be varied for application by trowel, brush or extrusion gun. It can be used as abrasion-resistant coating for electrical systems, as gasket sealing material and for applications throughout air conditioning systems where materials must withstand high temperatures without contaminating air and retain low moisture absorption factor. Made by **American Latex Products Corp.**, Dept. NE, 921 Venice Blvd., Los Angeles 15, Calif.

Mention Item NED-9482 when writing

ELECTRICAL INSULATING TAPE

Self-bonding Bi-Seal electrical insulating tape has better than 1000 volts dielectric strength per mil of thickness. When applied under normal wrapping tension such as in splicing of connections, tape coheres to itself and other insulations to produce permanent insulating jacket. Blended of synthetic polymers and resins, it is compatible with butyl rubber polyethylene and vinyl resins. It has good aging characteristics as well as resistance to ozone, moisture, acids and alkalies. It is available in 1-pound rolls of any desired width, packed in cartons containing 48 pounds net. Standard thickness is 0.020-inch. Made by **Bishop Gutta Percha Co.**, 426 E. 25th St., New York 10, N. Y.

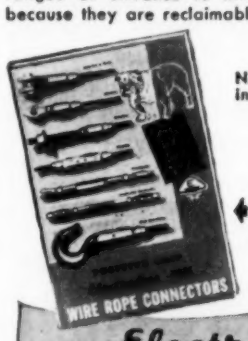
Mention Item NED-9483 when writing

Electroline -FIEGE WIRE ROPE CONNECTORS
The LAST WORD in

SAFETY—No heat, acids or complicated equipment required for installation. Ordinary mechanic's tools do the job, safely, even in chemical plants, powder plants and mines, where other methods would be prohibited.

MAKE CONNECTIONS SAFE . . . because they have the highest holding strength of any known wire rope or strand connectors.

SAVINGS—In Installation, because unskilled labor can easily do the job . . . and quickly. In Use, because they prolong wire rope life by damping vibration and overcoming rope fatigue at entrance to fitting . . . and because they are reclaimable.



Note ease of installation.

Send for new descriptive catalog.

Simply slip the sleeve over the cable, spread the strands, insert and drive in the plug then apply the socket. See what a solid and permanent joint you have by looking at it through the inspection hole put there for the purpose.

Electroline Company
4121 SOUTH LA SALLE STREET • CHICAGO 9, ILLINOIS

Mention Item NED-9484 when writing

3-POINT EFFICIENCY

By just touching a button (which can be placed anywhere in your plant) you start these doors up or down instantly. The rugged Kinnear Motor Operator does the work. With smooth, *coiling upward action,* Kinnear Rolling Doors clear *the entire opening* quickly. They save floor and wall space. When open, they remain out of the way, safe from damage. Kinnear's famous interlocking steel-slat curtain assures extra all-around protection. Write for complete information.

The KINNEAR Mfg. Co.
Factories:
3017 Fields Ave., Columbus 16, O.
1742 Yosemite Ave.
San Francisco 24, Calif.

OFFICES AND AGENTS IN PRINCIPAL CITIES

SAVING WAYS in DOOR WAYS

KINNEAR ROLLING DOORS

Mention Item NED-9485 when writing

HERE'S THE EASIEST WAY TO
• CUT HANDLING COSTS
• INCREASE PRODUCTION
• PREVENT ACCIDENTS

LO-HED ELECTRIC HOISTS AND CAR PULLERS

Slash your handling costs, boost production and prevent costly accidents by putting Lo-Hed Hoists and Car Pullers to work in your plant. Lo-Hed Hoists are built on the original low headroom principle, a plus feature you pay no premium for, in ¼ to 12 ton capacities. Lo-Heds are heavy-duty hoists, high in performance, low in maintenance—the hoists for handling materials overhead. Write for free Hoist and Car Puller Catalog.

Moving railroad cars, pulling skids, hauling products is a cinch with Æ Lo-Hed Car Pullers on the job.

LO-HED Electric Hoists AND CAR PULLERS
Products of American Engineering Company
Philadelphia 25, Pennsylvania
In Canada { Galbraith & Sulley Limited, Vancouver, B. C.
Affiliated Engineering Corporations Limited, Montreal and Toronto

Mention Item NED-9486 when writing

PROFIT BOOSTING STARTS WITH RAPISTAN CASTERS

STEEL-FORGED

FLAME-HARDENED

Looking for a starting point for increased profits? End failures and maintenance on casters. Install RapiStan STEEL-FORGED* casters on floor trucks and mobile equipment. Flame-hardened raceways mean longer wear. Get the complete details now on STEEL-FORGED casters or other

*T.M. RAPISTAN
PROFIT BOOSTING EQUIPMENT

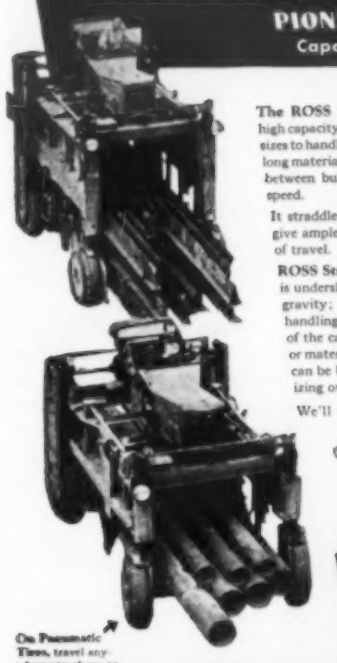
FREE

MAIL THE COUPON TODAY!
Check coupon for free bulletins

THE RAPIDS-STANDARD CO., INC.
378 RapiStan Bldg., Grand Rapids 2, Michigan
Send bulletins on the equipment checked
☐ Steel-Forged Casters ☐ Power Belt Units
☐ Rapid-Wheel Conveyor ☐ Portable Belt Units
☐ Rapid-Roller Conveyor ☐ Floor and Hand Trucks
Name .....
Address .....
City ..... Zone ..... State .....

Mention Item NED-9487 when writing

PNEUMATIC TIRED... STRADDLE CARRIERS
PIONEERED BY ROSS
Capacities: 1 to 12 Tons



The ROSS Straddle Carrier Truck, with high capacity tire equipment, is made in several sizes to handle all kinds of heavy, bulky or extra long materials or products . . . within buildings, between buildings or over the road at truck speed.

It straddles the load, lifts it just enough to give ample ground clearance for all conditions of travel.

ROSS Straddle Carriers are safer. The load is underslung, has an extremely low center of gravity; consequently the safest method of handling. Load is confined between the sides of the carrier, cannot roll off the sides. Loads or materials too long for other types of vehicles can be balanced centrally in the carrier, equalizing overhang.

We'll be glad to confer with you on your material and product handling problems.

ROSS FORK LIFT Trucks will handle your HEAVY LOADS. Capacities up to 9 tons.

On Pneumatic Tires, travel anywhere a truck can go.

ROSS HEAVY LOAD STRADDLE-CARRIERS & LIFT TRUCKS

ROSS CARRIER COMPANY • Benton Harbor, Michigan
Seattle • Portland • San Francisco • Vancouver, B.C. • New York City • Hoboken, N.J.

Mention Item NED-9488 when writing

A Good Question to ask . . . Should Our Rubber Parts Be Made By Specialists? . . . and to Answer!

3 MINUTES reading time will give you a new conception of the assistance you can gain by consulting specialists in molded and extruded rubber products. Also included in this little booklet is a check list which will be invaluable to you in ordering the rubber parts you need.

Ask your secretary to send for the booklet now. Your copy will be sent promptly.

Rubber by CONTINENTAL RUBBER WORKS
1985 LIBERTY STREET
ERIE, PENNSYLVANIA

Mention Item NED-9489 when writing

ATLAS STEPS AHEAD
WITH NEW IMPROVEMENT IN ROLLER CHAIN

Here's a new type of fastener for Atlas Detachable Roller Chain that is less apt to bend, shear off, or be dislodged entirely. When struck by a direct blow, it merely turns in its groove hugging it tightly. The chain can be disassembled whenever necessary with an ordinary screwdriver. Greater safety is possible through the absence of any dangerously exposed points. Additional advantages are described in our new catalog. Write for your copy today.

ATLAS CHAIN AND MANUFACTURING CO.
Kensington and Castor Avenues-Philadelphia 24, Pa.

Mention Item NED-9490 when writing

NEW Literature AND Catalogs

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Molybdenum Alloys

Climax Molybdenum Co.—391-page cloth-bound book entitled "Molybdenum Steels, Irons, Alloys" by R. S. Archer, J. Z. Briggs and C. M. Loeb, Jr. relates varied applications of molybdenum in materials ranging from wrought to cast steels and from cast iron to nonferrous alloys. Publication is intended as guide to designers and engineers in selecting suitable materials for given applications.

Mention Item **NED-9491** when writing

Flow Tube

Bethlehem Foundry & Machine Co.—6-page illustrated folder entitled "Bethlehem Flow Tube" describes principle on which these tubes operate to provide measurement, regulation and control of fluid flow.

Mention Item **NED-9492** when writing

Speed Reducers

Euclid Machine & Tool Co.—24-page illustrated catalog No. 201 explains features of complete line of single and compound reduction speed reducers which cover wide range of ratios for inputs ranging up to 3 horsepower. Torque and input horsepower rating charts are included for each type.

Mention Item **NED-9493** when writing

Rubber Products

Harris Products Co.—8-page illustrated bulletin provides data on line of spring shackles with concentrated pressure rubber bushings, Silent Bloc for fixed end spring bushings and other industrial applications, and Torflex bearings for vibration control and misalignment correction.

Mention Item **NED-9494** when writing

Flexible Couplings

American Flexible Coupling Co.—24-page illustrated booklet entitled "Relief from Bearing Wear Grief" explains how use of proper flexible couplings prevents downtime caused by bearing failure, shaft failure and damaged equipment. Functions of flexible couplings and their importance in relationship to equipment they connect are discussed.

Mention Item **NED-9495** when writing

Surface Finish Standards

Edward Blake Co.—6-page illustrated bulletin No. 1048 is descriptive of pocket and master sets of machine-cut surface finish standards consisting of 20 and 23 solid stainless steel specimens, respectively, each having machine-cut surface of predetermined roughness value ranging from 2 to 500 microinches.

Mention Item **NED-9496** when writing

NEW Model 150
PACIFIC HYDRAULIC PRESS BRAKE

CAPACITY
¼" x 12'

Features:

- Infinitely - variable stroke length
- Maximum pressure at any point in the stroke
- No gears or shafts — unmatched working clearance
- PROMPT DELIVERY!

for BENDING • PUNCHING • DRAWING
BRAKING • BLANKING • CORRUGATING

Write or wire for information

PACIFIC INDUSTRIAL MANUFACTURING CO.
848 Forty-ninth Avenue • Oakland 1, California

Mention Item NED-9497 when writing

FREE! HANDY! ILLUSTRATED
WALL CHART
Tells you how to select the RIGHT . . .
Eureka TOOL AND DIE WELDING ELECTRODE

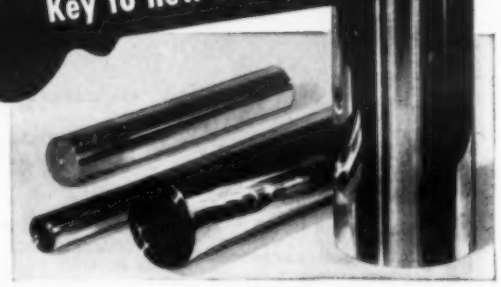
For repairing and rectifying errors, for composite fabrication or for changing design of tools and dies. Indicates properties of welds produced and color code.

WRITE NOW FOR YOUR FREE CHART

WELDING EQUIPMENT & SUPPLY COMPANY
The Pioneers of Tool & Die Welding Electrodes!
225 LEIB STREET • • • DETROIT 7, MICHIGAN

Mention Item NED-9498 when writing

Bushing stock that's different! Key to new savings!



Centrifugally cast, Shenango-Penn bushing stock offers the same money-saving auvantages found in Shenango-Penn made-to-order bushings, bearings, liners, sleeves, etc.

Advantages: Finer grain, increased density and tensile strength; finely divided, more uniform lead dispersion; elimination of sand inclusions and blow holes. In finishing: fewer rejects, less machining time, lower cost! In service: longer life, less breakage or distortion, reduced maintenance!

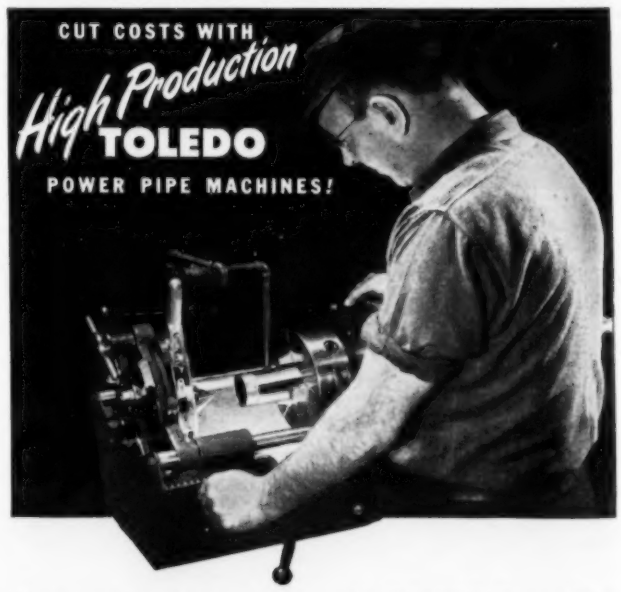
SHENANGO-PENN
ALL BRONZES
MONEL METAL
ALLOY IRONS

Bulletin No. 145 gives all data on the full range of conveniently located stock sizes.

SHENANGO-PENN MOLD CO.
874 West Third St. Dover, Ohio
Executive Offices: Pittsburgh, Pa.

Mention Item NED-9499 when writing

CUT COSTS WITH High Production TOLEDO POWER PIPE MACHINES!



You get *extra high production* with TOLEDO Power Pipe Machines—because of many time-and-labor-saving features! Toledo No. 999 Super Model threads 2" pipe in 22 seconds, cuts off 2" pipe in 10 seconds, and smaller sizes relatively fast. Quick change of die heads, ½" to 2" pipe incl. Small, compact, portable. For all pipe tool requirements—*save time, reduce costs* with TOLEDO! The Toledo Pipe Threading Machine Co., Toledo, Ohio. New York Office, No. 2 Rector Street Bldg.

TOLEDO
PRECISION PIPE TOOLS

Mention Item NED-9500 when writing

✓ FITS ALL BENCHMASTERS
✓ ADAPTS TO MOST OTHER PRESSES
✓ LOW PRICE

FRONT MOUNT

No more accidents, no wasted time, better production with this new Cost BENCHMASTER FRICTION ROLL FEED. Handles all stock—metal, wood, plastics, cardboard, etc., up to 3/16" thick, 3" wide. Feeds uniformly and accurately. Feed is adjustable from 0 to 3".

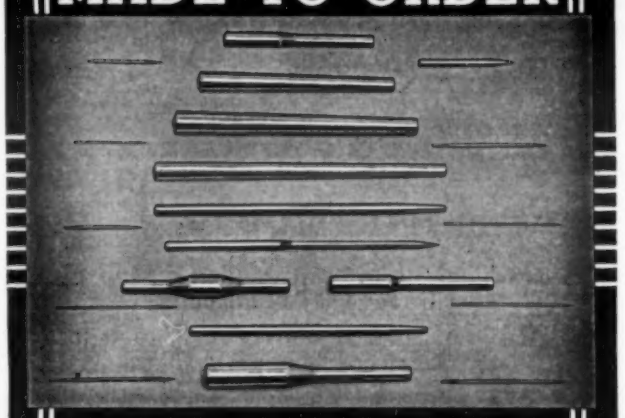
FRONT OR SIDE FEED. Bolts on either front or side of press for through or cross feed. Adjustable height aligns rolls level with die. Ideal for use on your Benchmaster and can also be adapted to most other presses.

High quality. Built to rigid Benchmaster standards assuring years of trouble-free service. Get yours today!

Dept. NED
benchmaster MANUFACTURING COMPANY 1952 WEST PICO BOULEVARD LOS ANGELES 6, CALIFORNIA
WORLD'S LARGEST PRODUCER OF SMALL PUNCH PRESSES

▲ Mention Item NED-9501 when writing ▲

MADE TO ORDER



Tubes, Rods, Wire reduced by rotary swaging to your specifications by the pioneer rotary swaging machine builder.

Cuts show various tubes reduced, tapered and closed on end by swaging. Solid work up to 5/8" diameter and medium wall tubing up to 2 1/2" O. D. can be handled.

You benefit from our nearly seventy years' rotary swaging experience.

The Torrington Company
SPECIALTY DEP'T.
Torrington, Conn., U.S.A.

▲ Mention Item NED-9502 when writing ▲

AID MANPOWER...SPEED MATERIALS HANDLING

with
"STREAMLINER JR."
PORTABLE BELT BOOSTER

It takes only one man to raise or lower the new "Streamliner Jr." with its exclusive hydraulic lifting arrangement. Of sturdy welded construction—the standard booster operates at 45 feet per minute, . . . is equipped with "Diamond Casters" for maximum mobility . . . can be "anchored" in any desired location by simply "flipping" the caster base. Positive tightening prevents the booster bed from slipping back. Write for full details today.

HARRY J. FERGUSON COMPANY
WHEEL • PORTABLE BELT • BELT AND ROLLER GRAVITY CONVEYORS
133 WEST AVENUE, JENKINTOWN, PENNA.

▲ Mention Item NED-9503 when writing ▲

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Temperature Control

Leeds & Northrup Co.—36-page illustrated catalog No. ND4A(2) presents data on Duration-Adjusting type of electric control for regulating temperature of electric furnaces, salt pots and certain fuel-fired furnaces. In addition to Micromax control instruments, catalog also lists Speedomax line of controllers for applications where unusual speed and sensitivity are required.

▲ Mention Item NED-9504 when writing ▲

Manufacturing Facilities

Hamilton-Thomas Corp. — 16-page illustrated booklet describes manufacturing facilities used to make plate bending rolls, paper mill driers, 200-ton battery molding presses, tunnelling machines, ink mills, pipe line compressors, rotary dumping valves, shapers, ceramic mixers, flood control and drainage pumps and regulating valves.

▲ Mention Item NED-9505 when writing ▲

Pneumatic Yoke Riveters

Hanna Engineering Works—16-page illustrated bulletin No. 244 describes 30-ton yoke riveters having 12 to 75-inch reach and 12 to 18-inch gap, 50-ton yoke riveters having 12 to 140-inch reach and 12 to 24-inch gap and 80-ton yoke riveters having 12 to 126-inch reach and 15 to 24-inch gap. Units are available in adjustable crank, link and bail, link and bail and feet, and stationary types.

▲ Mention Item NED-9506 when writing ▲

Electrical Substations

Allis-Chalmers Mfg. Co.—20-page illustrated bulletin No. 11B6895 is planning and engineering guidebook prepared to simplify and speed layout of load center unit substations. Information is given on units ranging from 100 to 2000 kilovolt-amperes with both liquid-filled and dry-type transformers.

▲ Mention Item NED-9507 when writing ▲

Stereoscopic Microscopes

Bausch & Lomb Optical Co.—20-page illustrated catalog No. D-15 and supplementary price list are descriptive of fifteen models of stereoscopic wide field microscopes.

▲ Mention Item NED-9508 when writing ▲

Electronic Potentiometers

Brown Instrument Co.—32-page illustrated catalog No. 15-13 is descriptive of ElectroniK strip chart electric control potentiometers, strip chart and circular chart recorders, precision indicators, strip chart and circular chart controllers, indicating controllers, pyrometric switches, thermocouple and Radiamatic assemblies.

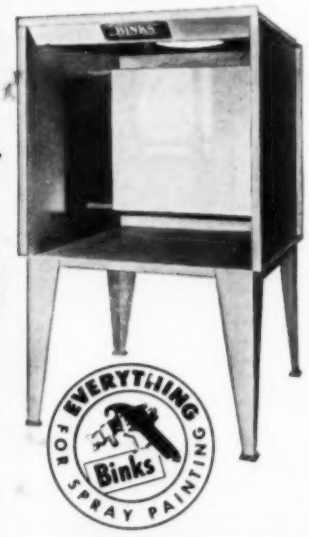
▲ Mention Item NED-9509 when writing ▲

Wire Stitchers

Acme Steel Co.—Complete line of Acme and Acme-Morrison Silverstitchers for stitching solid fiber and corrugated shipping containers is described in 12-page illustrated booklet entitled "Profit by Stitching."

▲ Mention Item NED-9510 when writing ▲

SPRAY BOOTHS —to fit the job you're doing



It doesn't matter what kind of work it is or how big it is—there's a Binks Spray Booth to fit . . . from the small dry bench-type pictured, to Dynaprecipitor water-wash units in sizes large enough for automobiles and railway coaches. Binks supplies everything you need.

Ask your jobber—or write us. Binks engineers will be glad to handle your "special" problems.

Binks MANUFACTURING COMPANY
3122-34 CARROLL AVENUE, CHICAGO 12, ILLINOIS

▲ Mention Item NED-9511 when writing ▲

NEED A HIGH SPEED PUMP?

Install an IMO

The IMO Pump can be operated at motor and turbine speeds. It is ideal for direct connection and integral mounting. Excepting for the flow and vaporization characteristics of the fluid being pumped, there's practically no limit to the speed at which an IMO Pump can be operated.

IMO Pumps can be furnished for practically any capacity and pressure required for oil, hydraulic-control fluids and other liquids.

Send for Bulletin I-147. W.

IMO I MOVE OIL
IMO PUMP DIVISION of the
DE LAVAL STEAM TURBINE CO.
TRENTON 2, NEW JERSEY

▲ Mention Item NED-9512 when writing ▲

Empco JACKS . . . just a twist of the wrist and your machines are LEVELED!

To lower, turn screw to left.
To raise, turn screw to right.

SELF-ALIGNING
SMOOTH, ACCURATE POSITIVE ADJUSTMENTS!

AVAILABLE in 3 SIZES
No. 1 2" normal height
No. 2 2 5/8" normal height
No. 3 3 1/8" normal height

Machine Tool Manufacturers strongly emphasize the need, not only to set machines level, but to keep 'em that way. Periodic re-leveling is essential for accurate work tolerances. How often, depends on the type of foundation. No method of machine setting is stable enough to maintain the accuracy of initial leveling. It is important to check after first month of operation, then check periodically and re-level whenever necessary.

When a machine is set on EMPCO JACKS, the whole operation is the work of but a moment: Simply apply a wrench to the "hex" screw head, turn right or left until your level indicator reads "zero".

EMPCO
THE ENTERPRISE MACHINE PARTS CORPORATION
2727 JEROME AVE. DETROIT 12, MICH.

▲ Mention Item NED-9513 when writing ▲

PRODUCTION UP 300%
USING MULTIPRESS* with INDEX TABLE

● Production jumped from 500 to 1500 parts per hour when a 6-ton Multipress and its Denison HydrOILic Index Table were installed at the Pivot Manufacturing Company of Detroit, Michigan. The job consists of broaching 5/8-inch splines on shafts used in auto-window controls.

Operators simply place shafts in fixtures on the six-station Index Table. Parts are then indexed automatically to the ram station, where they are forced through the broaching tool. At the next station parts are pushed up out of the broaching die by a cam

MULTIPRESS reduced the operator's work to an easy loading-and-unloading operation. Its uniform oil-hydraulic pressure greatly reduced reject losses. By ejecting broached shafts back out of the die, instead of pushing them through as before, cross members could be welded to shafts before broaching, ending distortion of finished shafts during welding.

MULTIPRESS *offers quiet, oil-smooth accuracy of power in 1, 4, 6, and 8-ton capacities. Manual and automatic controls for any ram action. The Index Table is only one of many standard* MULTIPRESS *accessories. Write for details.*

* REG. U. S. PAT. OFF.
DENISON EQUIPMENT for APPLIED HydrOILics
The DENISON Engineering Co.
1151 Dublin Road • Columbus 16, Ohio

▲ Mention Item NED-9514 when writing ▲

SAVE MONEY—DO THE WORK 3 TIMES FASTER!

Reduce your finishing costs with a Sterling Portable Electric Sander...the easy to use tool that sands, rubs and polishes. With it, anyone can produce quality work 3 times faster than by hand sanding. Use it to sand cabinets, refrigerators, furniture, autos, displays, doors—*any place* where you hand sand. Easy to operate, vibrationless, lightweight. Write for illustrated folder and prices.

Sterling Tool Products Company
1336-C Milwaukee Ave. • Chicago 22, Illinois

STERLING MODEL 1000 SANDER } PORTABLE ELECTRIC

FOR MAINTENANCE, PRODUCTION, REFINISHING, REPAIR

▲ Mention Item NED-9519 when writing ▲

RUST and corrosion don't have a chance to do any damage when Koppers Industrial Protective Coatings are used. Bituplastic,* for example, coats metal, concrete or masonry with a tough, thick film that waterproofs and vapor seals exposed surfaces . . . provides real protection against the elements and corrosive fumes. Write for full information about the 6 specialized Koppers Coatings.

KOPPERS

*Trade-Mark Reg. U. S. Pat. Off

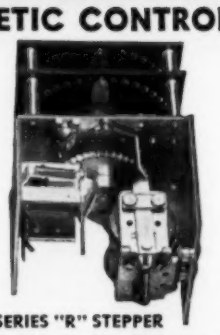
KOPPERS COMPANY, INC.
Dept. 1211T
Pittsburgh 19, Pa.

▲ Mention Item NED-9520 when writing ▲

of ELECTRO-MAGNETIC CONTROL

SERIES 220 RELAY

This small relay is capable of handling 20 amps at 220 v., the leader in its size and price field for inexpensive, compact, heavy current control. A very widely used small relay for industrial control such as welding machines, x-ray, motor starters, etc.



SERIES "R" STEPPER

Used for cycle control requiring continuous sequence repetitive operations; to remotely select and control multiple circuits; can be furnished to rotate continuously, reset automatically or to pulse both clockwise and counter clockwise on the same unit with up to 100 contacts on a disc.

Write—tell us your control problem. Get specific recommendations.

GUARDIAN ELECTRIC
1626P W. WALNUT STREET CHICAGO 12, ILLINOIS

COMPLETE LINE OF RELAYS SERVING AMERICAN INDUSTRY

▲ Mention Item NED-9521 when writing ▲

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Sheet Metal Equipment & Accessories

Schmieg Industries, Inc.—32-page illustrated catalog No. 481 offers comprehensive information concerning dust and fume control units, spray booths, mechanical washers, industrial ovens and sheet metal equipment and accessories. Tables of technical information for plant engineers and managers are included.

▲ Mention Item NED-9522 when writing ▲

Electric Tachometers

Metron Instrument Co.—Electric tachometers for industrial, marine, railway, diesel and aircraft applications and for direct head coupling in ranges from 1 to 100,000 revolutions per minute are described and shown in 4-page illustrated bulletin No. 104.

▲ Mention Item NED-9523 when writing ▲

Lathes, Shapers & Milling Machines

Sheldon Machine Co.—16-page illustrated catalog No. G-48 gives detailed information on 52 types and models of 10, 11 and 12-inch precision lathes; Sheldon-Vernon shapers and milling machines; and over 70 accessories and attachments.

▲ Mention Item NED-9524 when writing ▲

Instrumentation System

Automatic Temperature Control Co.—8-page illustrated catalog No. R-10 presents detailed engineering and application data on Atcotran instrumentation system featuring pressure measurements which are electrically transmitted with accuracies within 0.25-per cent of reading on indicator or recorder type instruments.

▲ Mention Item NED-9525 when writing ▲

Unit Heaters

Warren Webster & Co.—12-page illustrated booklet No. WN-133 describes Webster- Nesbitt series R unit heaters for heating corridors, lobbies, offices and showrooms. Available in four sizes, units have two, three, four or five fans depending on size. Motor is resilient-mounted and wound for either 115 or 230-volt, 60-cycle, single phase current.

▲ Mention Item NED-9526 when writing ▲

Precision Switches

Unimax Switch Corp.—20-page illustrated catalog No. 48-8 provides all engineering data necessary to choose correct precision switch for any service. Details are presented on basic switch and Adaptaplate interchangeable actuator.

▲ Mention Item NED-9527 when writing ▲

Pyrometers

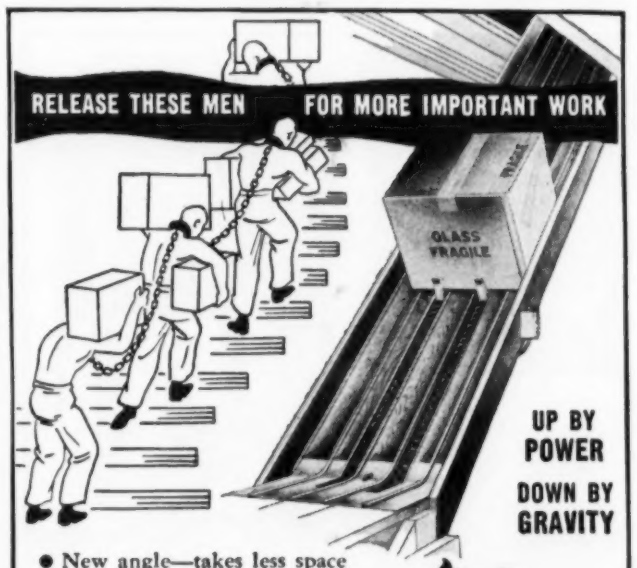
C. J. Tagliabue Corp.—36-page illustrated catalog No. 1101-J describes Celectray indicating, recording and controlling potentiometer pyrometers which embody phototube, beam of light and mirror galvanometer.

▲ Mention Item NED-9528 when writing ▲

Shears

Cincinnati Shaper Co.—32-page illustrated catalog No. S-5 discusses hydraulic holddowns, low rake to upper knife, tilted upper knife bar, rigidity of all-steel frame and other construction features of shears which provide for extremely accurate cutting. Various models in line and typical performance are depicted.

▲ Mention Item NED-9529 when writing ▲



- New angle—takes less space above and below—not 26° but up to 42°.
- No belt trouble—merchandise does not touch steel chain.
- Only six moving parts—all ball-bearing construction.

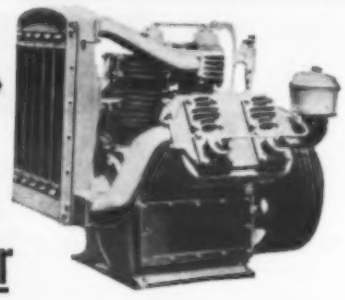
ALSO MODEL B – Up and down by power – For very heavy or very fragile merchandise

WEHLE beltless floor to floor ELEVATOR CONVEYOR

MANUFACTURED BY
WEHLE CONVEYOR COMPANY
Binghamton, N. Y. Agents in Principal Cities

▲ Mention Item NED-9530 when writing ▲

NEXT THING TO "FREE AIR"



is Worthington Compressed Air

Compressor builders for over 50 years, Worthington makes all types and sizes from angle-gas-engine giants down to the fractional hp. model for lighter industrial service. That includes, of course, a full line of standard horizontal and vertical compressors for every purpose.

Familiar with industry's widely varying needs, Worthington has introduced many advanced features to meet these needs with better performance. Worthington Feather* Valves, for example, are the most efficient ever made.

You can count on Worthington compressors for unfailing delivery of air at lowest possible cost . . . another reason why *there's more worth in Worthington.* Write to *Worthington Pump and Machinery Corporation, Merchandising Division, Dept. H827, Harrison, New Jersey.*

*Reg. U.S. Pat. Off.

WORTHINGTON

B8-27

▲ Mention Item NED-9531 when writing ▲

AUTOMATIC LOADERS FOR GEAR FINISHING

● WHAT THEY WILL DO:

1. Eliminate manual handling of individual gears IN and OUT of machines.
2. Boost production *automatically* to as many as 300 gears per hour per machine.
3. Cut machine idle time to 2 secs. or less per gear.
4. Enable finishing of cluster gears without any manual handling between machines.

● A TYPE FOR EVERY NEED:

Gravity feed, indexing feed, retractable jaw type, etc., for either rack or rotary machines.

For complete description of these devices ask for Gear Highlights, Vol. 12, No. 1.

ORIGINATORS of GEAR SHAVING

MICHIGAN TOOL CO.
7171 E. McNichols Rd. Detroit 12, U. S. A.

▲ Mention Item NED-9532 when writing ▲

TOTES MORE PAYLOAD at LESS COST . . .

LIGHT WEIGHT—Convoy Nesting Tote Box—weighs 50% to 60% less than steel . . . 2 cu. ft. size weighs only 7.2 lbs.

STRONG, DURABLE—Convoy Tote Boxes are made of chemically hardened corrugated board by an exclusive impregnation process . . . generally will support anything they will contain. Many of them have been in active daily use for more than two years. Armored rim for rigidity . . . strong, comfortable handholes.

LOW COST—Convoy Nesting Tote Box costs 50% to 60% less than steel . . . so inexpensive that they can be discarded when they finally become unserviceable.

More than 12 stock sizes of nesting boxes available now . . . write for details.

CONVOY, INC. Dept. N CANTON 7, OHIO

▲ Mention Item NED-9533 when writing ▲

GEROTOR hydraulic MOTORS

a rotary power source with unique advantages

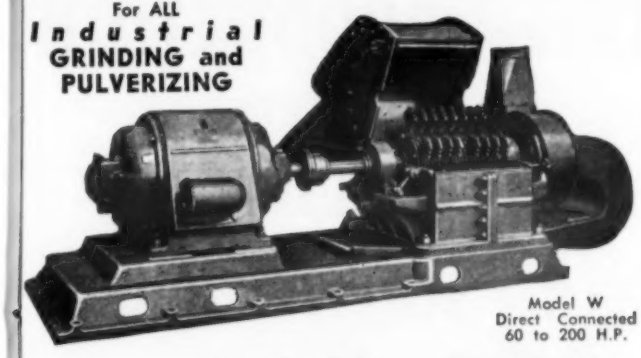
GEROTOR Hydraulic Motors can be stalled under load without damage, operated safely in explosive and corrosive atmospheres, installed in confined spaces. Low rotational inertia. Two models with plain, base or flange mounting—for direct coupling, belt, chain or gear drive. Sizes up to 8.7 h.p. Write for Catalog G-108.

GEROTOR air valves & cylinders • hydraulic pumps, motors, valves & cylinders

GEROTOR MAY CORPORATION, Baltimore 3, Md.

Mention Item NED-9534 when writing

For ALL Industrial GRINDING and PULVERIZING



Model W Direct Connected 60 to 200 H.P.

JAY BEE Hammer Mills

Increase Capacity — Reduce Operating Costs

Jay Bees Grind ANYTHING grindable—from feathers to firebrick

Whatever you grind . . JAY BEE Mills solve your problems with notable efficiency. Strength, durability and precision of operation are combined to give you a maximum of continuous operation, capacity and quality grinding at a minimum cost.

JAY BEE Mills, result of over 25 years of manufacturing experience, are made in many sizes and models . . 12 to 200 H.P., for Belt, V-Belt or Direct Connected drives . . for every grinding and pulverizing purpose. It will pay you to write for details.

J. B. SEDBERRY, INC.
Franklin, Tennessee

Mention Item NED-9535 when writing

ELWELL-PARKER LOW LIFT TRUCKS—
An Easy, Economical Step toward complete mechanization

For deliveries from spot to spot, E-P Low Lift Trucks are a profitable advance from hand trucks. These RIDDEN trucks go 3 times faster, carry larger loads and have a power lift. Skids from your hand trucking system can still be readily used. Low lift trucks represent the least expensive step beyond manual handling.

Elwell-Parker builds a complete line of RIDDEN low lift trucks. Capacities, 2 to 8 tons; reasonably prompt deliveries.

FREE BOOKLET describes scientific materials handling—ask for "Industrial Logistics"

THE ELWELL-PARKER ELECTRIC COMPANY
4502 ST. CLAIR AVENUE • CLEVELAND 14, OHIO

Mention Item NED-9536 when writing

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Lathe Turrets

Enco Mfg. Co.—16-page illustrated catalog No. 48 contains information on Enco Carriage Hexturret which is available for lathes having 9 to 32-inch swings. Turret selections for current and obsolete lathes are simplified by charts showing lathe manufacturers' recommendations.

Mention Item NED-9537 when writing

Electrical Measuring System

Automatic Temperature Control Co.—8-page illustrated catalog No. R-10 describes Atcotran instrument system for measuring, indicating, recording and controlling pressure, flow, level, humidity, temperature, density, weight, vacuum, draft and thickness.

Mention Item NED-9538 when writing

Sales Control System

Remington Rand Inc.—6-page illustrated folder gives information about positive methods to increase effectiveness of each sales dollar through use of Kardex visible record equipment, Graph-A-Matic signal control and automatic computing Chart-That-Thinks.

Mention Item NED-9539 when writing

Heavy Duty Engines

Wisconsin Motor Corp.—56-page illustrated brochure describes heavy-duty, air-cooled engines ranging from 2 to 30 horsepower in 1, 2 and 4-cylinder models. Photographs show applications of engines in industrial, mining, construction, railway maintenance and marine services.

Mention Item NED-9540 when writing

Electronic Controls

Wheelco Instruments Co.—4-page illustrated bulletin No. Z6500 and supplementary price list describe line of instruments for measuring, controlling and recording temperature, voltage, current, speed and many other variables in industrial processing. Combustion safeguards are discussed also.

Mention Item NED-9541 when writing

Floor Mats

American Mat Corp.—12-page illustrated folder No. 28-E entitled "A Mat for Every Purpose" describes floor mats of rubber, wood, composition and steel for commercial and industrial application for promotion of sanitation, safety and comfort.

Mention Item NED-9542 when writing

Aluminum Alloys & Mill Products

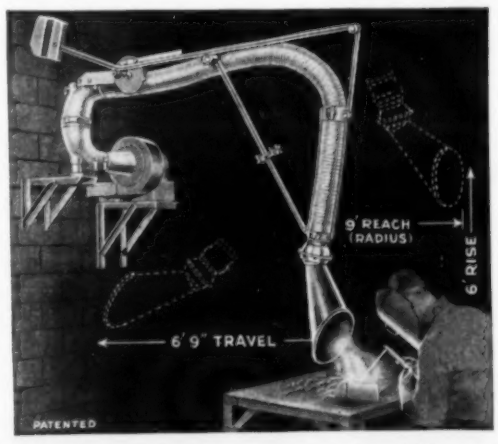
Reynolds Metals Co.—162-page data book provides information on tempers; sizes; shapes; physical, chemical, and mechanical properties; and fabricating characteristics of aluminum alloys. Explanatory text covers alloy designation system, temper designation system, heat-treatable and non-heat-treatable alloys, casting alloys, casting methods and foundry practice.

Mention Item NED-9543 when writing

Sewage & Waste Processes

Brown Instrument Co.—44-page illustrated catalog No. 7301 entitled "Instrumentation for Treatment of Sewage and Industrial Wastes" presents applications of measuring and controlling instruments for sewage and waste processes.

Mention Item NED-9544 when writing



RUEMELIN Fume Collector

Removes Welding Fumes at the Source...

Why continue to let your employees inhale welding fumes? You can solve the problem quickly and efficiently by installing a Ruemelin Fume Collector. It produces a powerful suction that draws out noxious gases, smoke and heat at the source. Guards employee health, resulting in less welder fatigue, therefore, greater plant output. Clears shop air with minimum loss of building heat. Covers maximum welding area vertically, horizontally and by circle swing. Shipped assembled, easy to install. 9 ft. and 15 ft. sizes (radius of swing).

Free engineering service for your fume collector installation. Write for Bulletin 37-C.

RUEMELIN MFG. CO.
3883 N. PALMER STREET MILWAUKEE 12, WIS., U. S. A.
MANUFACTURERS AND ENGINEERS — SAND BLAST AND DUST COLLECTING EQUIPMENT — WELDING FUME COLLECTORS

Mention Item NED-9545 when writing

from floor to roof there is a ROCK-TRED PRODUCT
ESPECIALLY FORMULATED TO MEET EVERY INDUSTRIAL BUILDING REQUIREMENT

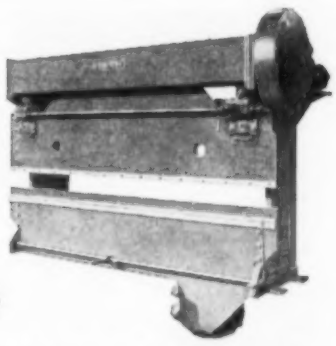
No matter what your building maintenance requirements may be, Rock-Tred offers you a specifically designed quality product that will do the job faster, better and more economically. More and more, industrial plants everywhere are standardizing on ROCK-TRED for easy economical resurfacing of worn floors; SPEED-PATCH for instant repair of cracks and holes; CHEM-ROCK for wet, greasy floors; LIFE-TITE roofing for hard surface roofs; ROOF-TEX for composition roofs; ROCK-CRETE for making floors acid-resistant; FLOOR-GLO for enameling all types of floors; COVER-OIL for painting oily surfaces; FLINT-TRED, TUFF-TRED, SEEP-SEAL, CAULKING compounds, and many other materials. A complete line for maintenance of all buildings from floor to roof. Write for details NOW!

Rock-Tred engineers will assist you with your maintenance problems. Send details and our recommendations will be forwarded quickly. No obligation.

ROCK-TRED Corporation
629 West Washington Blvd • Chicago 6, Illinois
In Canada: Rock-Tred Corporation (Canada) Limited, Toronto 5

Mention Item NED-9546 when writing

Get all these ADVANCED DESIGN FEATURES in your next Power Press Brake



- **Motor-Driven Slide Adjustment.** Adjusts to .001".
- **Multiple Disc Friction Clutch** always dependable.
- **High-Efficiency Friction Brake** holds slide at any part of stroke.
- **Low Deflection Slide and Base,** maximum deflection .001" per foot of machine width.
- **All-Steel Construction** for strength, accuracy.
- **Wedge Type Release Mechanism** relieves ram if dies are bottomed to the extent that brake stalls.
- **Gears Operate in Oil.** Helically-cut first drivers.
- **One-Piece Forged Shaft** of high-carbon steel.
- **Centralized Lubrication** serves all bearings.
- **Safety Enclosed Drive** for pulley, belt, flywheel.
- Capacity 120 tons. Forms mild steel $\frac{7}{16}$" x 4 ft., $\frac{5}{16}$" x 6 ft., ¼" x 8 ft. or $\frac{3}{16}$" x 10 ft. at 30 strokes per minute.
- ***Write for Bulletin 106A.*** Columbia Machinery and Engineering Corporation, Hamilton, Ohio.

Columbia PRESS BRAKES AND SQUARING SHEARS

Mention Item NED-9547 when writing

WIPE WELD SPATTER CLEAN

1. Brush or spray Protect-O-Metal in weld seam and on adjacent metal.
2. Weld
3. Simply wipe off spatter with a dry cloth.

Save Up To 85% of Weld Cleaning Labor

Unretouched photo shows how quick weld spatter "comes clean" when you paint or spray Protect-O-Metal No. 2 before welding. Spatter comes off in a fraction of the time and for a fraction of the expense of ordinary methods. No profit-wasting work with air chisels, wire brushing, or sand blasting. Get smooth, clean surfaces ready for painting if necessary . . . Unlike all other "spatter-proofing" compounds, Protect-O-Metal No. 2 contains no oils or organic ingredients, will not cause smoke, fumes, or odors. One coat serves for single or multi-pass welds, costs about a tenth of a cent per foot of weld, saves up to three times its cost in time savings alone.

PROTECT-O-METAL No. 2

G. W. Smith & Sons, Inc.
5402 Kemp Road, Dayton 2, Ohio

ORDER A TRIAL GALLON ($3.15) for testing in your plant. Your money back if compound does not prove entirely satisfactory.

Mention Item NED-9548 when writing

MASKING PROBLEM?

KWIK-MASKS

STAY ON

DURING:

• Spray Painting • Sandblasting • Tumbling

— Because the finest pressure-sensitive adhesive is used.

More and more manufacturers are turning over their masking problems to Wiggins. We specialize in making to order in any shape and size, no matter how intricate, self-adhesive masks for a wide variety of industrial applications.

We also furnish for a variety of uses paper or colored cellulose combined with other materials and die-cut to any shape.

An inquiry will bring details and samples promptly. Please mention intended use.

Wiggins

MANUFACTURING DIVISION

Dept. A-1, Norwood, Mass.

Mention Item NED-9549 when writing

for EVERYTHING for Welding ANYTHING...

Two important benefits are yours when you call on Westinghouse for all of your welding needs. First: a single source of supply—one responsibility—for any requirement from helmets to heavy-duty automatic equipment. Second: sureness of dependable quality ...the natural product of years of experience in designing, building and developing the world's most complete welding line. That's why you can select with confidence when you specify Westinghouse for any welding need. Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pa. J-21493

Westinghouse

PLANTS IN 25 CITIES ... OFFICES EVERYWHERE

EVERYTHING for Welding ANYTHING!

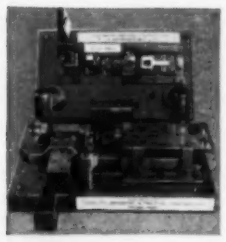
Mention Item NED-9550 when writing

EQUIPPED TO SERVE YOU ECONOMICALLY

GEARED TO SERVE YOU QUICKLY AND INTELLIGENTLY

ANYTHING IN SHEET METAL FABRICATION AND STAMPINGS

SLASH — Production Time! — CUT COSTS by letting QUALITY HELP you SOLVE YOUR PROBLEMS



A 4 station progressive Die.

for DIES • TOOLS JIGS

If you desire we can do your Metal Stampings and Light Assembly. Also Fabrication work if you require.

Quality Hardware one of the largest and most modern equipped shops in the country, highly skilled mechanics and management over 30 years' experience and know-how.

Assembly includes: welding, riveting, soldering and bench work. Large volume jobs including packaging and shipping.

TOOLS for high Production or SINGLE operation TOOLS if desired.

Phone Wire or Write us your Problems

QUALITY HARDWARE & MACHINE

DIVISION

CONTINENTAL-UNITED INDUSTRIES CO., INC.

5835 N. Ravenswood Ave., Chicago 26, Illinois

Mention Item NED-9551 when writing

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Electrical Equipment

Martindale Electric Co.—60-page illustrated catalog No. 27 covers line of equipment which includes Motor-Flex units, sanding drums, commutator maintenance tools, armature wedge beveler, spiral expansion reamers, rawhide faced hammers, fuse puller and tester, utility etcher, heavy duty blower, Master-Vac industrial cleaners and metalworking saws.

Mention Item NED-9552 when writing

Flexible Tubing

Pennsylvania Flexible Metallic Tubing Co.—"Flexi-neering" is title of 6-page illustrated catalog describing Penflex flexible metal hose applications ranging from exhausts for diesel engines to shielding on water-cooled power lines.

Mention Item NED-9553 when writing

War Suplus Equipment

Acme Equipment Co.—Illustrated folder gives brief descriptions and prices of war surplus equipment which includes fire extinguishers, electric hoists, lift trucks, conveyors, oxygen-acetylene generators, production lathes, flexible shaft grinders, rotary beading and flaring machine, wire stitcher, steel refuse cans, hardwood stools, rectifiers and nailing machines.

Mention Item NED-9554 when writing

Propeller Fans

Ilg Electric Ventilating Co.—Three types of self-cooled motor propeller fans are featured in illustrated catalog No 148. They include sizes and capacities to handle requirements of all exhaust fan applications.

Mention Item NED-9555 when writing

Tapping & Threading Machine

Warner & Swasey Co.—Illustrated bulletin supplies data on No. 11 tapping and threading machine which has capacity range of from 1/8-inch pipe thread to 5/8-inch National Coarse or National Fine threads. Cutting of left-hand and external threads is described.

Mention Item NED-9556 when writing

Pipe & Fittings

National Carbon Co.—Illustrated catalog No. M-8800B contains detailed information on Karbate corrosion-resistant pipe and fittings. Pipe sizes and fittings are shown, and cross-section drawings illustrate dimensions, assemblies, joining recommendations and other details.

Mention Item NED-9557 when writing

Wood Fabrication Presses

R. D. Wood Co.—Four presses used in production fabrication of veneers, plywood and laminated wood are described in 8-page illustrated brochure. Presses for automatic production bonding of plywood, processing hard synthetic building board panels, and manufacture of composition and hard board building panels are covered.

Mention Item NED-9558 when writing

YOUR A-N CONTRACT MAY REQUIRE

Cellophane A-N color code hydraulic tube identification with pressure-sensitive adhesive .... or you may need flat or tubular (sleeve type) cellulose acetate butyrate, permanent hydraulic tube identification.... Other coding, marking, labeling, identification material .... All printed to your specifications.

TOPFLIGHT TAPE CO.

DIVISION OF TOPFLIGHT TOOL COMPANY INC.

YORK, PENNSYLVANIA

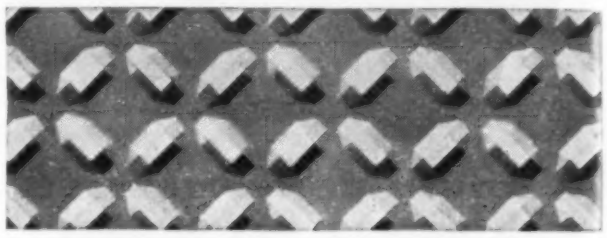
Mention Item NED-9559 when writing

Slippery?

Smooth plant floors can become slippery as an eel. Grease and water can make them treacherous underfoot . . . and resultant accidents can be costly.

Install U·S·S Multigrip Floor Plate where sure footing is essential. Multigrip provides skid resistance and traction, wet or dry. Use Multigrip on machine platforms and steps, for space in front of factory machines, and even for whole factory floors.

Get further information about Multigrip from your nearest steel warehouse or write to us direct.



Carnegie-Illinois Steel Corporation, Pittsburgh and Chicago

Columbia Steel Company, San Francisco, Pacific Coast Distributors

Tennessee Coal, Iron & Railroad Company, Birmingham Southern Distributors

United States Steel Export Company, New York

8-1061

USS

MULTIGRIP FLOOR PLATE

UNITED STATES STEEL

Mention Item NED-9560 when writing

Speed PRODUCTION

UNBRAKO

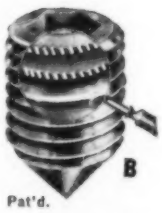
Reg. U. S. Pat. Off.

SOCKET SCREW PRODUCTS

A

"Unbrako" Socket Set Screw with Knurled Cup Point.

Pat'd. & Pat. Pend.



B

Pat'd.

"Unbrako" Socket Set Screw with Knurled Threads

They're KNURLED!

Knurling of Socket Screws originated with "Unbrako" in 1934.

Millions of these "Unbrako" Socket Screw Products—in sizes from No. 4 to 1½" diameter, in a full range of lengths—are being used throughout industry to: *save assembly time, facilitate compact designs, reduce weight and costs.*

(A) The patented KNURLED cup point of this popular "Unbrako" Socket Set Screw makes it a Self-Locker . . . because the keen edges of the counter-clock-wise KNURLS positively prevent creep, regardless of the most chattering vibration. A real fastener, if ever there was one . . . positively *will not shake loose!*

(B) The KNURLING—as shown—swages the threads of this patented "Unbrako" Socket Set Screw,—so that it becomes a most excellent Self-Locker . . . for use with—cone, flat, oval, half and full dog points which can not be knurled—a Set Screw that positively "will not shake loose"!

As all our patented "Unbrako" Set Screws, regardless of point, are Self-Locking, we can lock most any set screw application. We are prepared to furnish "Unbrako" Socket Screw Products in Stainless Steel.

Write us for the name and address of your nearest "Unbrako" Industrial Distributor and your copy of the "Unbrako" Catalog.

KITS. PATS. PEND.

You can't tighten or loosen socket screws without a hex socket wrench, so why not get our No. 25 or No. 50 "Hallowell" Hollow Handle Key Kit which contains most all hex-socket bits.

Over 45 Years in Business

STANDARD PRESSED STEEL CO.

JENKINTOWN, PENNSYLVANIA, BOX 581

CHICAGO—DETROIT—INDIANAPOLIS—ST. LOUIS—SAN FRANCISCO

Mention Item NED-9561 when writing

SPRING PRESSES

POWER AND FOOT OPERATED

For riveting, staking, stamping and similar operations on small light parts. Constructed to compensate for variation in thickness of the work and to deliver a UNIFORM BLOW AT EVERY STROKE.

M-110 (illustrated) motor driven to eliminate fatigue factor of foot operated press—similar press M-130, equipped to operate by compressed air.

SEND FOR BULLETIN

EST. TF 1834

THE TAYLOR & FENN CO. HARTFORD 1, CONN.

▲ Mention Item NED-9562 when writing ▲

SUNROC

Engineered to Specifications

Sunroc specialization pays off when water cooler design must conform to specific or abnormal needs. Here are three typical examples.

The triple-purpose **SUNROC SUPER COOLER,** in one compact unit, supplies properly chilled drinking water, 3 ice-cube trays (24 jumbo cubes), and about 2 cubic feet of refrigerated storage space.

SUNROC CAFETERIA COOLER MODEL CAFE 2B is ideal for diners, lunch rooms, tea rooms . . . or as an auxiliary cooler in restaurants and cafeterias, to save waitresses' time. Capacity, 8 gallons per hour.

EXPLOSION-PROOF SUNROC WATER COOLER MODEL SAFE is Underwriter-approved for hazardous installations. It was specially designed to cope with this danger; its static condenser makes it invaluable where water is scarce.

The water coolers you need will be found among the 17 superb Sunroc models—so, *standardize with Sunroc and be sure!* For complete information, write Dept. NE-12, Sunroc Refrigeration Company, Glen Riddle, Pa.

Sunroc WATER COOLERS GLEN RIDDLE, PA. OFFICES IN PRINCIPAL CITIES

America's most complete line of water coolers, $199.95 up, F. O. B. Glen Riddle, Pa.

▲ Mention Item NED-9563 when writing ▲

IDEAL FOR FIELD USE!

FOR HOME, SHOP OR PLANT!

KETT PORTABLE POWER SAW

Cuts straight lines or curves. No starting holes to drill. Leaves "milled edge" finish. Cuts through mild steel to 10 ga., aluminum 3/16 in., plastics and other material to 1/4 in. Listed below are the Kett angle drilling attachments which are interchangeable with the cutting head and can also be used with flexible shafts.

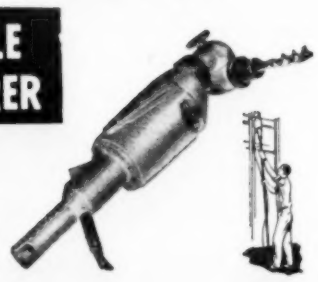
Kett Right Angle Chuck — Kett Right Angle Head — Kett Universal Drill Attachment — Kett Heavy Duty Right Angle Attachment

See your distributor or write for Bulletin E-12.

KETT PORTABLE TALL REACH BORER

FOR ELECTRICIANS, PLUMBERS, HOME SHOP, ETC.

Drills holes high, low, or in "hard" corners, in wood to 2¾", metal to ½", masonry to 1". 80% time savings over hand boring. Extension converts tool to tall reach borer that drills ten feet above floor.



The KETT TOOL COMPANY

5 EAST THIRD STREET CINCINNATI 2, OHIO

▲ Mention Item NED-9564 when writing ▲

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Electric Plants

D. W. Onan & Sons Inc.—20-page illustrated catalog No. A-138A points out difference between alternating current, direct current and battery charging electric plants. Sizes range from portable 350-watt model AAE weighing 77 pounds to 35,000-watt diesel units.

▲ Mention Item **NED-9565** when writing ▲

Alloy Castings

Michiana Products Corp.—16-page illustrated booklet No. 111 covers compositions, properties and applications of various heat-resistant alloys, stainless steel, Ni-Resist, abrasion-resistant alloy castings and high temperature fans.

▲ Mention Item **NED-9566** when writing ▲

Rotary Files

American Swiss File & Tool Co.—6-page illustrated folder describes hand cut and ground-from-solid rotary files and tabulates dimensions and latest prices of current standard shapes and sizes with coarse, medium and fine cuts.

▲ Mention Item **NED-9567** when writing ▲

Plastic & Castable Refractories

Harbison-Walker Refractories Co.—Plastic fire brick and castable refractories are described by 6-page illustrated bulletin which gives typical applications and step-by-step directions for their preparation and installation.

▲ Mention Item **NED-9568** when writing ▲

Welding Branch Pipe Outlets

Bonney Forge & Tool Works—24-page illustrated catalog No. W-2 entitled "Bonney WeldOlets for Branch Pipe Outlets" presents complete design and application information on welding, threaded and socket outlets.

▲ Mention Item **NED-9569** when writing ▲

Fractional Horsepower Motors

Redmond Co.—8-page illustrated catalog No. 3a/9 covers line of Micromotor fractional horsepower motors ranging in size from 1/500 to 1/15-horsepower. Units are made in both open-ventilated and totally-enclosed models.

▲ Mention Item **NED-9570** when writing ▲

Drop Forged Hardware

Merrill Brothers—Illustrated reference book No. 1948 provides engineering data, descriptive material and prices on drop forged industrial hardware and specialties.

▲ Mention Item **NED-9571** when writing ▲

Boring & Reaming Tool

Erickson Tools Div., Erickson Steel Co.—Features of Erickson-State boring and reaming tool for holes from 1-1/6 to 5-½ inches in diameter are covered in 2-page illustrated folder and supplementary price lists. Adjustable core drills for holes from 1-⅛ to 5-½ inches in diameter are also described.

▲ Mention Item **NED-9572** when writing ▲

Solve small space requirements with ORANGE ROLLER BUSHINGS

A TYPICAL CASE

In designing the Reversing Reduction Gear Box of WAGNER-MOBILE FOLD-AWAY LIFTS and SCOOPMOBILES, engineers of Mixermobile Manufacturers, Portland, Ore., sought the highest anti-friction protection within very limited space. This was obtained by using two Orange Roller Bushings on the Idler Gear and two in the Gear Cluster.

To make your product more compact, while improving its performance, install Orange Roller Bushings wherever you need highest anti-friction protection for rotating or oscillating parts. Orange Roller Bushings carry high loads with very small space requirements — run smoothly, quietly — give long, trouble-free operation in all kinds of service. An outstanding feature is the closer internal running clearances which minimize possibility of misalignment of rollers while running. Consult our engineers on any bearing application.

* * *

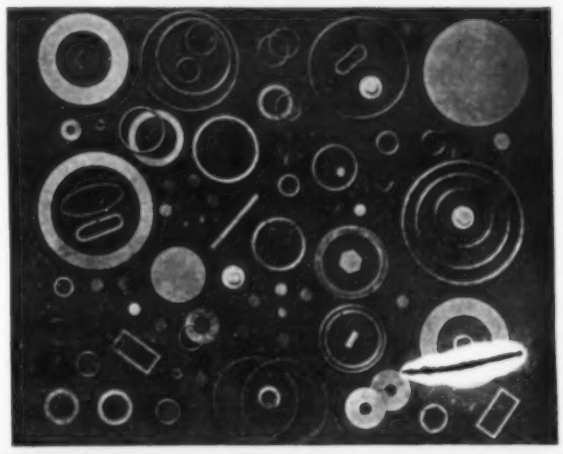
WRITE FOR ENGINEERING DATA BOOK showing sizes, capacities, load factors, installation data, etc.

ORANGE ROLLER BEARING CO., INC.
568 Main Street, Orange, N.J.

▲ Mention Item NED-9573 when writing ▲

SPEEDIER PRODUCTION • LOWER COSTS WITH KRE-CO PREPLACED BRAZING ALLOYS

Tell us to send you facts and figures that show how the use of KRE-CO rings, disks, flat washers and stampings in any shape or size, to meet any metal joining requirement, can be used to lower production costs. Made from Easy-Flo, Sil Fos, Copper, Phos Copper, Bronze and Aluminum. Request for facts involves no obligation.



CHARLES W. KRIEG COMPANY
48-60 Dickerson St. - HUmboldt 5-2000 - Newark 4, New Jersey

▲ Mention Item NED-9574 when writing ▲

NEW Bond BEVERAGE TRUCK

No. 5035

HIGH STACKING
SMOOTH ROLLING

•

Speed up delivery, pickup and general handling. High capacity reduces foot travel. Sturdy construction provides long service with hard usage.

Semi-pneumatic tires and ball bearing mounted wheels assure smooth shockproof transportation for fragile loads.

Truck is full-welded tubular steel, 49 inches high, nose 14" wide by 7½" deep and weighs only 29 lbs. Equipped with stair glides. Available also with double hand grips or 10" tires.

Send for free literature on the complete line of Bond Hand Trucks.

BOND FOUNDRY & MACHINE CO.
308 Penn St., Manheim, Pa.

▲ Mention Item NED-9575 when writing ▲

NEWEST in Hydraulic Gauges!

The Schrader *Direct Action* HYDRODIAL

You can read it 50 ft. away

Withstands shock and overloads

Here's one hydraulic gauge that can take it! Works on the same direct action principle that made Schrader gauges so popular. Extra large, clear markings visible at 50 ft. White dial. Heavy duty case. Clear non-breakable plastic crystal. Pressure ranges from 5-50 to 500-5000 lbs. per sq. in. Write for Bulletin A55 today!

Nine Pressure Ranges

A. SCHRADER'S SON, 478 Vanderbilt Avenue
Brooklyn 17, N. Y., Dept. DEN 1228 Division of Scovill Manufacturing Company, Incorporated

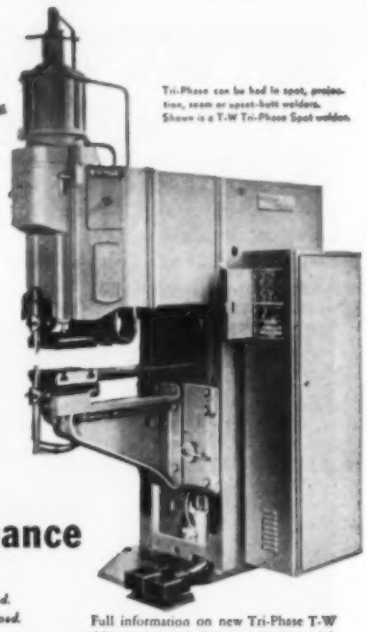
Please send me your new Bulletin A55 explaining the new HYDRODIAL Hydraulic Gauge.

Schrader PRODUCTS CONTROL THE A.S.

Name_____
Company_____
Address_____
City_____ State_____

▲ Mention Item NED-9576 when writing ▲

NOW -the New Tri-Phase TRADEMARK TAYLOR-WINFIELD WELDERS (RESISTANCE)



Tri-Phase can be had in spot, projection, seam or upset-butt welders. Shown is a T-W Tri-Phase Spot welder.

Greater Electrical Efficiency and Improved Welding Performance

POWER SUPPLY FEATURES
1. Greatly reduced power demand.
2. Three phase balanced power load.
3. Desirable high power factor.

DESIRABLE D. C. WELDING CURRENT
1. More work—same welder—deeper throat depths—with essentially no increase in power demand.

FLEXIBILITY AND VERSATILITY
1. Can weld low carbon steel, stainless steel, aluminum, magnesium, monel, inconel, brass alloys and other materials on same welder.

HIGH PRODUCTION EFFICIENCY AND LOW MAINTENANCE COST
Tri-Phase welders are simple, accessible and easy to maintain, and operate with simplified controls.

Full information on new Tri-Phase T-W welders sent promptly upon request. Ask for Bulletin 10-813, just off the press, or call the T-W sales engineer in your territory

THE TAYLOR-WINFIELD CORPORATION
WARREN, OHIO, U. S. A.

TAYLOR-WINFIELD RESISTANCE WELDERS

▲ Mention Item NED-9584 when writing ▲

MEASURE HIGH VACUUM
ACCURATELY, EASILY, ECONOMICALLY, WITH DPA-37
our newest Ionization Gauge Control Circuit

DPA-37, measures all pressures commonly met in high-vacuum diffusion pump work. It incorporates all desirable features you would look for.

DPA-37 is sensitive—Using VG-1A Ionization Gauge Tube, DPA-37 measures from .0025 mm to .0000005 mm of Hg in four ranges.

Easy to operate! For taking a pressure reading, just two dial adjustments—no calibration charts needed.

Easy to maintain—Circuit tubes and nearly all other parts standard radio type for simple, inexpensive maintenance.

Built-in automatic overload relay assures maximum life for VG-1A Ionization Gauge, protecting it from abrupt surges of pressure.

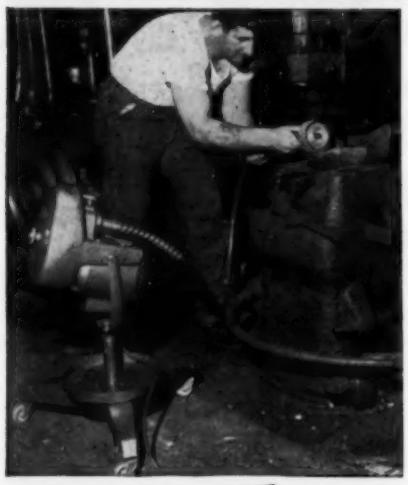
Price for DPA-37 panel mounted, $350. Cabinet mounted model illustrated, $365. For a more complete description of its features, write—

VACUUM EQUIPMENT DIVISION
DISTILLATION PRODUCTS, INC.
763 RIDGE ROAD WEST, ROCHESTER 13, N. Y.
570 Lexington Avenue New York 22, N. Y.
135 So. La Salle Street, Chicago 3, Illinois

Manufacturers of Molecular Stills and High-Vacuum Equipment; Distillers of Oil-Soluble Vitamins and Other Concentrates for Science and Industry.

▲ Mention Item NED-9585 when writing ▲

AVOID PRODUCTION DELAYS with . . .



STOW

Streamlined FLEXIBLE SHAFT MACHINES

● Keeping set-ups intact by regrinding worn dies right on the press is just one of the many ways customers are using the NEW STOW Streamliner to speed-up production and cut costs.

Take the tool to the job and you, too, save time and money. STOW Flexible Shaft Machines go everywhere in the shop—they are available in portable high or low pedestal, suspension or bench mountings . . . with a wide range of power and speed ratings. They'll do almost everything—grind, file, drill, sand, wire brush, buff or polish . . . in hard-to-get-at places and around obstructions.

Only STOW Streamliners have all these features:
1. Genuine STOW Flexible Shaft.
2. Ball bearing motor and handpiece.
3. Instantly regulated V-belt drive.
4. Free-swinging pivot mounting

See the improved STOW Streamlined Flexible Shaft Machines at your mill supplies dealer — or write today for full details.

STOW MANUFACTURING CO.
26 Shear St., Binghamton, N. Y.

▲ Mention Item NED-9586 when writing ▲

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Vibration Control

Korfund Co.—Advantages and limitations of spring mountings, rubber mountings and cork materials in control of vibration, together with data on their installation and uses, are given in 4-page illustrated bulletin No. G-101.

▲ Mention Item NED-9587 when writing ▲

Plaster Mold Castings

Ohio Precision Castings, Inc.—Advantages of plaster mold technique in producing high-lead bronze castings for Shartle knuckle joints are explained in illustrated data sheet entitled "OPC News Castings."

▲ Mention Item NED-9588 when writing ▲

Pumps

Roy E. Roth Co.—Specifications, selection tables and prices of heavy duty flexible coupled pumps, special metal pumps and series of industrial pumps are included in 18-page illustrated bulletin No. 101.

▲ Mention Item NED-9589 when writing ▲

Bottle Labeling

National Starch Products, Inc., National Adhesives Div.—Illustrated booklet entitled "Successful Bottle Labeling" contains information on selection of proper type of adhesive for applying all types of labels to glass surfaces. Chapters are devoted to such subjects as methods of labeling, selections of labels, container design, handling of adhesives, and regulation and care of machines.

▲ Mention Item NED-9590 when writing ▲

Inspection Equipment

George Scherr Co.—28-page illustrated booklet presents details of line of micrometers, vernier calipers, height gages and other tools for toolmakers and mechanics. Shown also are Magni-Ray illuminated magnifier, dial thickness measure, optical center locator and quartz optical flats.

▲ Mention Item NED-9591 when writing ▲

Miniature Lathes

Lorber Export Import & Purchasing Co.—16-page illustrated catalog No. P17/CA8 is descriptive of series 17 Pultra micro lathes and accessories for use in turning, polishing, saw cutting, drilling, milling and grinding of small parts.

▲ Mention Item NED-9592 when writing ▲

Metal Blackening Processes

Enthone, Inc.—8-page illustrated booklet provides information on Ebonol-C for blackening and protecting copper and copper aloys, Ebonol-S for blackening iron and steel, and Ebonol-Z for blackening zinc and zinc alloys.

▲ Mention Item NED-9593 when writing ▲

Steam-Detergent Cleaning

Oakite Products, Inc.—8-page illustrated booklet describes steam-detergent cleaning of walls, ceilings, floors, loading platforms, lift trucks, electric motors, machinery and conveyors; paint-stripping of equipment before repainting; and cleaning of parts before inspection and repair. Types of steam-cleaning equipment and detergents designed for use with such equipment are covered.

▲ Mention Item NED-9594 when writing ▲

BELT LACING and FASTENERS for transmission and conveyor belts

"JUST A HAMMER TO APPLY IT"

ALLIGATOR
Trade Mark Reg. U. S. Pat. Office
STEEL BELT LACING

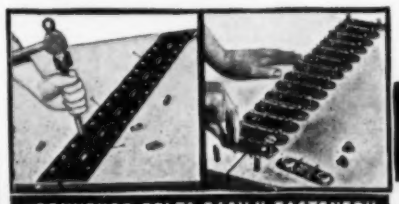
World famed in general service for strength and long life. A flexible steel-hinged joint, smooth on both sides. 12 sizes. Made in steel, "Monel Metal" and non-magnetic alloys. Long lengths supplied if needed. Bulletin A-60 gives complete details.

FLEXCO HD
BELT FASTENERS AND RIP PLATES

For conveyor and elevator belts of all thicknesses, makes a tight butt joint of great strength and durability. Compresses belt ends between toothed cupped plates. Templates and FLEXCO Clips speed application. 6 sizes. Made in steel, "Monel Metal", non-magnetic and abrasion resisting alloys.

By using Flexco HD Rip Plates, damaged conveyor belting can be returned to satisfactory service. The extra length gives a long grip on edges of rip or patch. Flexco Tools and Rip Plate Tool are used. For complete information ask for Bulletin F-100.

Sold by supply houses everywhere

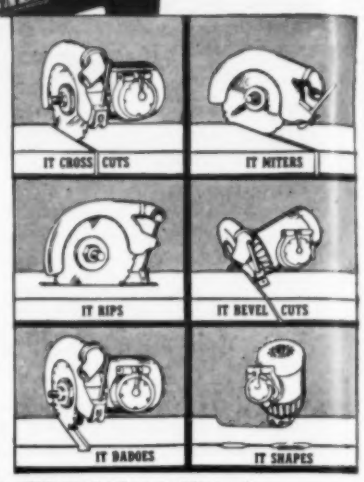


"CONVEYOR BELTS EASILY FASTENED"

FLEXIBLE STEEL LACING CO.
4664 LEXINGTON ST.
CHICAGO 44, ILL.

▲ Mention Item NED-9595 when writing ▲

THE NEW DEWALT ALL-PURPOSE POWER SAW!



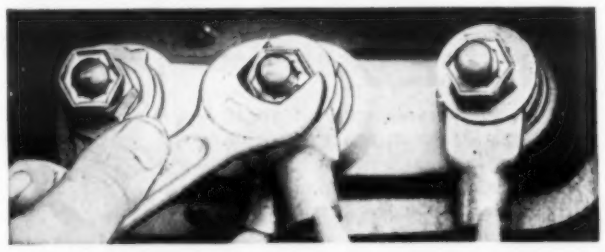
Does the work of many *machines!* Accurate, flexible, dependable — precision built for continuous service.

Write for catalog.

DEWALT, INC.
1212 Fountain Avenue
Lancaster, Penna.

▲ Mention Item NED-9596 when writing ▲

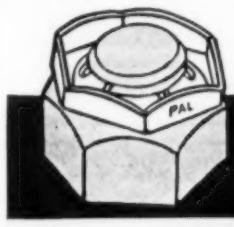
PALNUTS Keep Terminal Connections Permanently Tight
Trademark Reg. U.S. Pat. Off.



PERFECT CONDUCTIVITY
●
NO HEATING OR CORRODING OF CONTACT SURFACES

PALNUTS apply on top of regular nuts, holding them to original tightness. Spring washer is eliminated between nut and terminal lug. Nuts can no longer back off nor can opened washer reduce contact area. PALNUTS require little space, are light in weight, low in cost, easily applied. Will not loosen under severest vibration. Used for years on electrical equipment of all types. Send for details of needs for samples. Write for literature showing entire line of PALNUTS.

THE PALNUT COMPANY
45 Cordier St., Irvington 11, N. J.



DOUBLE-LOCKING PALNUTS
REG. U. S. PAT. OFF.

▲ Mention Item NED-9597 when writing ▲

Especially designed for accurately controlled preheating or for "work-horse" heating. Closely controlled for assembly operations.

Rectangular shapes are available in almost any size, also portable units, wattages to supply up to 850° F. Heating surface is highly polished, non-warping, cold-rolled steel — with no plating to flake off. (Round type, gray cast iron plate.)

Controls: For temperatures up to 550° F., adjustable clamp-on bimetallic, or bulb type thermostat is furnished. For temperatures over 550° F., 3-heat snap switch is supplied. Heating element: Burn-out resistant, replaceable Watlow Strip Units. Leveling legs supplied when specified.

Full details in Watlow Catalog—send for it.

SPECIALISTS IN ELECTRIC HEATING UNITS

WATLOW
ELECTRIC MANUFACTURING COMPANY
1318 N. 23d St. St. Louis 6, Mo.

▲ Mention Item NED-9598 when writing ▲

For Lower Cost Internal Grinding...

Grinding Wheels Made by a Radically Improved Process

Precise control is the keynote of the new Norton process—precision mixing, precision molding, precision burning. And precision throughout manufacture means a precision product, wheels that have—

1. Precise Size
2. Precise Balance
3. Precise Grinding Action

And not only does the new process make wheels better but also faster. Burning time alone has been cut from a matter of days to hours. Ask your Norton abrasive engineer about these new internal wheels. They are definitely cutting costs for many users.

NORTON ABRASIVES

NORTON COMPANY, WORCESTER 6, MASS.

Mention Item NED-9599 when writing

Spraying Systems SPRAY NOZZLES consistently provide accuracy of spray that means better operation and lower cost for you. Whatever you specify in terms of pressure, volume, spray pattern, distribution, impact, and atomization can be duplicated accurately with a Spraying Systems Spray Nozzle. Write for the facts ... ask for Catalog 22, a reference manual that lists spray characteristics for thousands of spray nozzle types and sizes.

SPRAYING SYSTEMS CO.
Engineers and Manufacturers
4029 W. LAKE STREET • CHICAGO 24, ILLINOIS

WRITE FOR CATALOG 22

Mention Item NED-9600 when writing

Now... BAKER *offers a* NEW LIGHTWEIGHT, *Low-Cost Electric* FORK TRUCK *in the* 2000 lb. Class

Designed to meet a specific demand in material handling.

Now Baker completes its line with the FRH-20, a light weight, low cost, highly maneuverable electric fork truck in the 2000 lb. field ... This truck is ideal for plants where narrow aisles, limited floor capacity and low capacity elevators are factors and where loads can be limited to 2000 lbs., 36 inches long.

See this new truck in action at the Materials Handling Exposition, Philadelphia, January 10-14, 1949.

BAKER INDUSTRIAL TRUCK DIVISION
of The Baker-Raulang Company
2179 West 25th Street • Cleveland 13, Ohio

Baker INDUSTRIAL TRUCKS

Mention Item NED-9601 when writing

New Literature—Continued

Use Inquiry slip enclosed between pages 4-5 or 68-69 to obtain any of the literature reviewed in this column.

Riveters

Hanna Engineering Works—16-page illustrated bulletin No. 246 provides information on Rapid riveters available in wide range of sizes in capacities from 6 to 20 tons, capable of cold driving $\frac{3}{16}$ to $\frac{3}{8}$-inch rivets.

Mention Item NED-9602 when writing

Blowers & Blast Nozzles

Schutte & Koerting Co.—12-page illustrated bulletin No. 4-AB contains dimensions, connection sizes and capacities of steam jet blowers and blast nozzles for moving large volumes of gas at low drafts. Typical applications of various types of blowers and blast nozzles are shown.

Mention Item NED-9603 when writing

Tapping & Threading Attachments

Ettco Tool Co.—Seven sizes of Ettco-Emrick tapping and threading attachments for drill presses are described in 6-page illustrated bulletin No. 22. Also included is table which simplifies selection of quill clamps to be used with attachments on any standard drill press.

Mention Item NED-9604 when writing

Overhead Cable Trolley Conveyor

Smith Power Transmission Co.—4-page illustrated catalog No. 551 provides specifications and details on FlexoiD overhead cable trolley conveyor. Designed for easy installation, system can be lengthened or shortened in a few minutes by merely adding or removing trolleys on cable.

Mention Item NED-9605 when writing

Dust Control

W. W. Sly Mfg. Co.—24-page illustrated bulletin No. 98 entitled "Industrial Dust Control" contains information on basic principles which apply to control of dust in industrial plants. Dimensions and capacities of dust filters and dust control systems are included.

Mention Item NED-9606 when writing

Valves

Lunkenheimer Co.—12-page illustrated folder No. 577 describes interchangeability of parts by which standard Renewo valves can be converted to either nickel alloy or stainless steel plug type valves by simply changing seats and disks. Available in globe and angle types, valves are rated at 200 and 300 pounds steam pressure.

Mention Item NED-9607 when writing

Drilling Tools

Chicago-Latrobe Twist Drill Works—225-page plastic-bound illustrated catalog entitled "For More Holes per Grind" is descriptive of company's line of drills, reamers, countersinks, counterbores, carbide tools and special tools.

Mention Item NED-9608 when writing

Corrosion Resisting Pumps

Duriron Co.—20-page illustrated bulletin No. 815 describes model 40 series M centrifugal Durcopumps for handling corrosive solutions. Wet end of pump is available in 12 alloys, and all parts can be made interchangeable. Bulletin offers information on packing, lubricant, vertical seals, water jacketed stuffing boxes, strainers and claw impellers.

Mention Item NED-9609 when writing

FAST FINISH BAKING

Refinished Relay Covers and other Control Parts Formerly Air Dried in 8 Hours—Now a Better Wrinkle Finish is Baked in ONE Hour with the

Despatch R-S FINISH BAKING OVEN

● Minneapolis-Honeywell Regulator Co. uses the above Despatch R S Oven for refinishing of controls sent in for repair. The black wrinkle enamel on the relay cover shown is baked to an extremely hard, durable finish in 1 hour at 300° F. saving 7 hours of former air drying time! Other parts are baked ½ hour at 350° F. This fast baking of finishes speeds up the entire repair program, improves service to customers.

Despatch R S Ovens are well insulated, very economical, 100% controlled for uniform heat up to 500° F., with temperature variation seldom more than 3° ± F. Built in a range of sizes for a great variety of applications. Tell us your needs—

Write for Bulletin on R S Ovens.

DESPATCH OVEN CO. Established in 1902

Manufacturers of ovens for:
Paint Finishing, Dehydrating, Curing, All Industrial and Laboratory Applications

325 DESPATCH BLDG., MINNEAPOLIS 14, MINNESOTA

Mention Item NED-9610 when writing

Now...added catcher-capacity on the *New* 8 cu. ft. model 125

Wilshire POWER SWEEPER

New Efficiency, Too!
Riding SULKY
FOR ALL MODELS

● Sturdy steel construction throughout.
● Rubber-tired air wheels with brake.
● Easily detachable.

Presenting a *powerful* new sweeper that covers more area faster...*reduces cleaning time and maintenance costs as much as* 90%. Keeps floors free of welding rod butts, nails, chips, paper, dirt—keeps lawns, drives, parkways, free of paper, sand, debris. For specifications and prices, write today—DEPT. NED-12.

QUICK FACTS
POWER. 2 or 3 h.p. gas motor, air-cooled, 4 cycles.
FRAME. Cast aluminum.
BODY. 20-ga. sheet steel.
SWEEP. 36". Sweeps to within 1" of walls.
FACTORY TESTED. 90-day guarantee.
GUIDE WHEEL. Protects walls and equipment.

DEALERS: Choice Territories Open!

WILSHIRE POWER SWEEPER CO.
4615 Alger St., Los Angeles 26, Calif.

SWEEPING THE COUNTRY SINCE 1940

Mention Item NED-9611 when writing

Faster Compacting!

● PLASTICS ● PHARMACEUTICALS
● CERAMICS ● POWDERED METALS

with

DEFIANCE Presses

Here's a *precision press*—Defiance Model #20—with an outstanding performance record of many years serving industry! Designed for *high speed production* of plastic preforms ... powdered metals ... pharmaceuticals ... dry pressing ceramics ... similar operations. New advanced features include: *Positive Pressure Lubrication with electrical interlock* ... press won't start until oil has been pumped to all moving parts. *Improved Feeder Construction* minimizes material losses. Weights, pressures instantly adjustable without stopping machine. 75 ton capacity. Write for details—also on Model #45, 200 ton capacity. Defiance Machine Works, Inc., 2325 Madison Ave., Toledo 2, Ohio.

98 YEARS OF PRECISION MANUFACTURING

Mention Item NED-9612 when writing

KEL NIT *Hand Protection ..Key to Greater Production*

The improved hand protection you get with Kel-Nit's skilled design and longer wearing loop fabric can help increase production through better materials handling and accident prevention. They last longer...let us prove it to you!

Write today for descriptive folder!

KELLER GLOVE MFG. CO.
PLUMSTEADVILLE, PA.

Mention Item NED-9613 when writing

Albion QUALITY CASTERS

"THE BEST FOR LESS"

for every Industrial use

LIGHT—MEDIUM—HEAVY DUTY

— IMMEDIATE DELIVERY —

With Pat-Pend. Work-hardened, Rolled-in Ball Race, From 3" up to 12" Diameter Wheels. Available also are Trailer Truck, Stem Type, and Grooved "V" Wheel Casters.

ALL ALBION QUALITY CASTERS ARE AVAILABLE WITH PLASTIC, SEMI-STEEL, SOLID RUBBER AND MOLDON RUBBER WHEELS.

SEND FOR YOUR FREE CATALOGUE AND PRICE LIST TODAY.

ALBION INDUSTRIES, INCORPORATED
ALBION, MICHIGAN
Sales Offices in Principal Cities

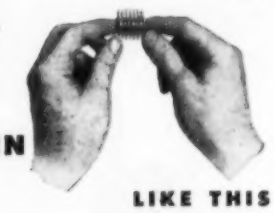
▲ Mention Item NED-9614 when writing ▲

When You Speak of **PRIME SURFACE**

YOU CAN MEAN **PLAIN TUBE**

LIKE THIS

OR ITS EQUIVALENT SURFACE AREA *in* **WOLVERINE TRUFIN**



LIKE THIS

In heat transfer work Wolverine Trufin surface is generally considered all prime surface—not secondary surface. In calculating a given heat transfer problem, unknown factors are eliminated—your calculations need not involve intangibles.

Trufin will deliver a very high rate of BTU's per square foot. Being all-one-piece—the fins extruded from the tube itself—Trufin will withstand vibration and extreme heat changes.

Trufin—THE integral finned tube—will do everything that plain tube will do—and along with that, offers increased surface area. It can be formed and bent as readily as plain tube.

Send for Bulletin J-12

WOLVERINE TUBE DIVISION
CALUMET AND HECLA CONSOLIDATED COPPER COMPANY
INCORPORATED

1411 CENTRAL AVENUE • DETROIT 9, MICHIGAN

▲ Mention Item NED-9615 when writing ▲

The most *Versatile, Practical* SHOP PRESS you've ever seen

THE *Rodgers "Sixty"*

Behind the label—Rodgers "Sixty" 60 Ton Shop Press with power driven hydraulic pump—is a flexible, highly efficient production unit that will prove invaluable in taking care of those many miscellaneous time and labor consuming jobs. Powered with the Rodgers "D" pump and newly-designed four-way valve, it has all of the desirable features of a streamlined press for general shop use. Power pumps are available with or without four-way valve—and in manual or solenoid control.

The "Sixty" is but one of Rodgers series. Standard shop presses are available in the 100, 150 and 200 ton sizes, with 300 and 400 tons capacity presses made to order. All include the same proved Rodgers design and performance features. All are rugged, durable, flexible and versatile.

There is a Rodgers Shop Press exactly suited for your needs in any tough service and maintenance work in pressing, squeezing and forcing. Prompt delivery on standard models.

Send today for your copy of the "Rodgers Hydraulic Shop Presses" catalog. It gives complete descriptions, illustrations and specifications of the various models.

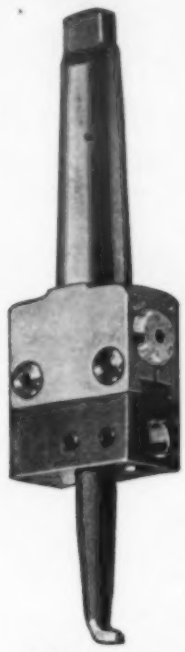
Rodgers Hydraulic, Inc.

7425 Walker Street, St. Louis Park, Minneapolis 16, Minn.

▲ Mention Item NED-9616 when writing ▲

Index to Advertisers

A. K. Tool Company 7
Abart Gear & Machine Co. 30
Abrasive Products, Inc. 15
Accurate Spring Manufacturing Co. 18
Acme Equipment Co., Inc. .. 34
Acromark Co., The 33
Adams, R. P., Co., Inc. 5
Aget-Detroit Company 17
Airetool Manufacturing Co., The 39
Alan Wood Steel Co. 39
Albion Industries, Incorporated 68
Allen Bradley Co. 35
Allen Manufacturing Co. 36
Allied Products Corporation. 20
Allis Chalmers 27, 38, 47
Allison Company, The 18
Aluminum Ladder Company. 57
Alvey-Ferguson Co., The 6
American Associates, Inc. .. 57
American Cyanamid Company 27
American Engineering Company 59
American Machine & Metals, Inc.-United States Gauge .. 6
American Mat Corporation .. 36
American Monorail Company, The 18
American Optical Company .. 49
American Recording Chart Co. 17
American Saw Mill Machinery Co. 4
American Screw Company ... 57
American Ventilating Hose Company 48
Ammco Tools, Inc. 27
Ampco Metal, Inc. 58
Anti-Corrosive Metal Products Co., Inc. 70
Aro Equipment Corp., The ... 45
Atlas Chain and Manufacturing Co. 60
Atlas Press Co. 23
Aurand Mfg. & Equip. Co. .. 11
Automatic Transportation Co., Div. of The Yale & Towne Mfg. Co. 71
Avery Adhesive Label Corp. . 44
Baker Industrial Truck Div. of The Baker-Raulang Co. 67
Barber-Colman Company ... 32
Barber-Greene Company 55
Barnes, W. O., Co., Inc. 19
Barnstead Still & Sterilizer Co., Inc. 28
Barnes, W. O., Co., Inc. ... 15
Bay, Inc. 9
Bay State Abrasive Products Co. 25
Bear Mfg. Co. 22
Behr-Manning 59
Bellows Co., The 10
Benchmaster Manufacturing Company 61
Bernard Welding Equipment Co. 3
Beverly Shear Mfg. Co., The 44
Biddle, James, G., Co. 42
Binks Manufacturing Company 61
Bird & Son, Inc. 58
Black Diamond Saw & Machine Works, Inc. 44
Black Manufacturing Company, The 33
Blackhawk Mfg. Co. 15
Blaw-Knox Div., Blaw-Knox Co. 30
Bond Foundry & Machine Co. 65
Bradley Washfountain Co. .. 21
Brady, W. H., Company 5
Breuer Electric Mfg. Co. 23
Brewer, William F., Machine Company 58
Briggs & Stratton Corp. 13
Brooks Equipment & Mfg. Co. 28
Brown, W. R., Corp. 51
Brown Engineering Co. 54
Browne & Sharpe Mfg. Co. .. 55
Browning Manufacturing Co., Inc. 2
Bruning, Charles, Co., Inc. . 34
Burgess-Manning Company .22, 47
Buschman, E. W., Co., Inc., The 8
Bussmann Mfg. Co. 32
Cabot, Samuel, Inc. 19
Cambridge Wire Cloth Co. 27
Campbell-Hausfeld Company, The 15
Cannon Electric Development Co. 40
Carnegie Illinois Steel Corp. . 64
Carolina Industrial Plastics Corp. 13
Carpenter Steel Company, The 55
Champion Pneumatic Machinery Co. 57
Cherry Rivet Company 20
Chicago Manufacturing & Distributing Co. 35
Chicago Wheel & Mfg. Co. .. 72
Chiksan Company 28
Clark Bros. Bolt Co. 8
Clark Industrial Truck Div. of Clark Equipment Co. ... 51
Cleveland Cap Screw Co., The 50
Cleveland Crane & Engineering Co., The. Cleveland Tramrail Division 49
Cleveland Worm & Gear Company, The 54
Climax Molybdenum Company 6
Colonial Broach Co. 17
Colson Equipment & Supply Co. 48
Columbia Electric Mfg. Co. .. 15
Columbia Machinery and Engineering Corp. 63
Columbia Steel Company 64
Commander Mfg. Co. 16
Commercial Shearing & Stamping Company, The ... 48
Congress Drives Div. Tann Corp. 46
Continental Diamond Fibre Co. 38
Continental Rubber Works ... 60
Continental Screw Co. 55
Convoy, Inc. 62
Cover, H. S. 8
Crane Co. 70
Crescent Truck Company 20
Cullen-Friestedt Co. 70
Cuno Engineering Corp. 14
Cuyahoga Spring Co., The ... 17
Cyclohm Motor Corporation Division Howard Industries, Inc. 45
Dart, E. M., Manufacturing Co. 56
Davis Emergency Equipment Co., Inc. 29
Defiance Machine Works, Inc. 67
DeLaval Steam Turbine Co. . 61
Dempster Brothers, Inc. 16
Denison Engineering Co., The 22, 61
Despatch Oven Co. 67
Detroit Hoist & Machine Co. . 53
Detroit Power Screwdriver Co. 47
Detroit Stamping Co. 8
DeWalt, Inc. 66
Dietzgen, Eugene, Co. 49
Distillation Products, Inc. ... 66
Downs Crane & Hoist Co. .. 5
Dracco Corporation 48
Dresser Industries, Inc. 30
Dresser Manufacturing Div. Dresser Industries, Inc. ... 30
Drinkwater, Incorporated ... 5
Driv-Lok Pin Company 56
duMont Corporation, The 43
Duro Metal Products Co. 53
Eastern Industries, Inc. 7
Eastman Kodak Company ... 21
Eaton Manufacturing Company 3
Eclipse Air Brush Company. 19
Edmont Mfg. Co. 70
Electric Controller & Mfg. Co., The 29
Electro Machines, Inc. 71
Electroline Company 59
Elwell-Parker Electric Co., The 63
Enterprise Machine Parts Corp., The 61
Exact Weight Scale Company, The 54
Executone, Inc. 12, 69
Ex-Cell-O Corporation 18
Fab-Weld Corporation 57
Fafnir Bearing Co., The 55
Farquhar, A. B., Company .. 40
Farrelloy Co. 15
Federal Products Corp. 11
Felt Products Mfg. Co. 25
Felters Company, The 30
Ferguson, Harry J., Company 61
Fisher Governor Company ... 56
Flexible Steel Lacing Co. ... 66
Flexrock Company 72
Foley Mfg. Co. 35
Food Machinery and Chemical Corporation Anderson-Barngrover Division 16
Formica Insulation Co., The. 30
Foxboro Co., The 5
Galland-Henning Mfg. Co. .. 18
Gast Manufacturing Corp. ... 39
Gatke Corporation 31
General Box Company 33
General Controls 32
General Electric Company 19, 35, 40, 50, 69
General Plate Division of Metals and Controls Corp. . 41
General Radio Co. 49
General Tire & Rubber Co., The 25
Gerotor May Corporation 63
Goodrich, B. F., Chemical Co. 31
Gorton, George, Machine Co. 33
Gray Hub Co. 3
Greer Hydraulics, Inc. 72
Guardian Electric 62
Hamilton Tool Company, The 27, 50
Hammond Machinery Builders, Inc. 29
Handy & Harman 37
Hannifin Corporation 19, 51
Hansen, A. L., Mfg. Co. 28
Harnischfeger Corporation . . 34, 50
Harrington Co., The 32
Hart Manufacturing Company, The 33
Haskelite Manufacturing Corp. 54
Haskins, R. G. 51
Hassall, John, Inc. 35
Hays Corporation, The 37
Hebard, W. F., & Co. 26
Hein-Werner Corporation ... 43
Hewitt-Robins, Inc. 47
Hill Acme Company, The 43
Homer Manufacturing Co., Inc., The 10
Homestead Valve Mfg. Co. .. 20
Honan-Crane Corp. 36-37
Hough Shade Corporation, The 44
Huber Gear & Wheel Co. 3
Hunt, Rodney, Machine Co. . 52
Hyster Company 16
Illinois Testing Laboratories, Inc. 25, 46
Independent Pneumatic Tool Co. 52
Industrial Gear Mfg. Co. ... 20
Industrial Products Company 11
Ingersoll-Rand 69
International Nickel Co., Inc., The 40
International Resistance Company 41
Invincible Vacuum Cleaner Mfg. Co. 26
Ironbound Box & Lumber Company 12
Jeffrey Manufacturing Co., The 26
Johns-Manville 11
Johnson Bronze 43
Johnson Gas Appliance Co. .. 41
Jones, Howard B., Division Cinch Mfg. Corp. 20
Joy Manufacturing Co. 55
Kalamazoo Tank & Silo Company 16
Kaytee Products 21
Kearney & Trecker Corporation 41
Keller Glove Mfg. Co. 67
Kennametal, Inc. 53
Kester Solder Co. 51
Kett Tool Company, The ... 65
Key Company 37
Keystone Conveyor Co. 46
Kinnear Mfg. Co., The 59
Koehring Company 38
Koffler Sales Corporation 24
Koppers Company, Inc. 62
Korb-Pettit Wire Fabrics & Iron Works, Inc. 54
Krieg, Charles W., Company 65
Laminated Shim Co., Inc. . . 26, 57
Lamson Corporation 43
Leavitt Machine Co., The . . 31, 47
Leeds & Northrup Company. 9
Leiman Bros. 46
Lift Trucks Incorporated 54
Lima Electric Motor Co., The 46
Linde Air Products Co., The. 13
Linderme Machine and Tool Co., Inc. 18
Link Belt Company 41
Littell, F. J., Machine Co. .. 53
Logan Co., Inc. 4, 10
Lovejoy Flexible Coupling Co. 28
Lyon-Raymond Corporation . 17, 52
McCord Corporation 46
MacRae's Blue Book 12
Manheim Manufacturing & Belting Co. 53
Marshalltown Mfg. Co. 49
Martin, Glenn L., Company, The 23
Master Rule Mfg. Company, Inc. 11
Mathews Conveyer Company . 36-37
Maxwell Company, The 68
Mead Specialties Company . 23, 52
Metzgar Co. 44
Michigan Tool Co. 62
Mitts & Merrill 36
Moccasin Bushing Company. 49
Monarch Rubber Company, The 2
Mortell, J. W., Co. 72
Moto-Truc Company, The ... 69
Munton Manufacturing Co. .. 12
National Acme Co., The 29



Write for your "Mastur" Bulletin

MAXWELL *"Mastur"* PRECISION BORING HEADS

CAPACITIES—⅜" TO 15"

"MASTUR" boring tools are available in 3 sizes for immediate delivery. They are equipped with any standard shank, boring bars, and bits and are ready for operation on your boring, milling, turret and automatic machines.

TOOL STEEL adjusting screw is graduated into 50 divisions to provide readings in thousandths and body is graduated to give vernier readings to 0.0002".

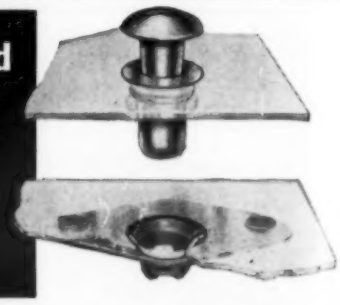
HEADS can be used for either rough or finish boring operations, and cutters can be carbide tipped.

TOOLS are compact, rugged, dependable and accurate. All surfaces finish ground and full offset in either direction is featured.

THE MAXWELL COMPANY
Max-WELL-Made Tools
12390 BROADWAY BEDFORD, OHIO

▲ Mention Item NED-9617 when writing ▲

The High-load Fastener Is Simmons' Quick-Lock



Yes, for sure-tight fastening, specify Quick-Locks. They're easy to install and simple to operate—lock or unlock with a quarter turn. You'll find them in inspection doors and engine cowls, or securing demountable accessories—voltage regulators, amplifier units, etc. Here's why:

Maximum load supporting—Solid supports take the main load, permitting maximum stress with safety and minimum deflection.

Material thickness variable—The same Quick-Lock, by simple adjustment of a special receptacle, holds sheets from 1/32" to 5/16".

Fits straight or curved surfaces—Flexible mounting and tapered stud make Quick-Locks ideal for assembling curved sheets.

Air-tight and water-tight—Where perfect sealing is required, special receptacles give you an air-tight pressure seal.

Millions of Quick-Locks are now in use. Design engineers marvel at their utility and flexibility. You will, too. Write for complete information and free samples today.

SIMMONS FASTENERS

SPRING-LOCK • QUICK-LOCK • LOCK-NUT

Simmons Fastener Corp., 1757 N. Broadway, Albany 1, N. Y.

▲ Mention Item NED-9618 when writing ▲

GREATEST ADVANCE IN V.O.M. HISTORY

**Note . . . These Sensational Improvements*

★ Beautiful Streamlined Instrument.

★ Large 5½ Inch Meter In Special Molded Case Under Panel.

★ Resistance Scale Markings from .2 Ohms To 100 Megohms — Zero Ohms Control Flush With Panel.

★ Only One Switch — Has Extra Large Knob 2½" Long — Easy To Turn — Flush With Panel Surface.

★ New Molded Selector Switch — Contacts Are Fully Enclosed.

★ Unit Construction — Resistors, Shunts, Rectifier, Batteries All Are Housed In A Molded Base Built Right Over The Switch — Provides Direct Connections Without Cabling — No Chance For Shorts.

★ All Resistors Are Precision Film Or Wire Wound Types — All Sealed For Permanent Accuracy.

★ Batteries Easily Replaced — New Double Suspended Contacts.

TRIPLETT Model 630
$37.50
Dealer Net
Adapter Prod For TV High Voltage Tests Extra

A completely new Volt Ohm Mil-Ammeter that does more . . . has proved components . . . and will give a lifetime of satisfaction.

For complete information and technical data write

TRIPLETT ELECTRICAL INSTRUMENT CO.
BLUFFTON, OHIO
In Canada: Triplett Instruments of Canada, Georgetown, Ontario

▲ Mention Item NED-9619 when writing ▲

Help relieve switchboard congestion instantly with Executone Intercommunication

"Inside" phone calls cause switchboard snarls — delay important calls from customers — keep everybody waiting for lines. But the instant you install Executone... "inside" calls are *eliminated!* Switchboard service is immediately improved! Executone saves invaluable time and energy... co-ordinates departments... introduces *new* efficiency! 100,000 successful installations. U-L approved — unconditionally guaranteed. Sales and Service in principal cities. Get the whole story today!

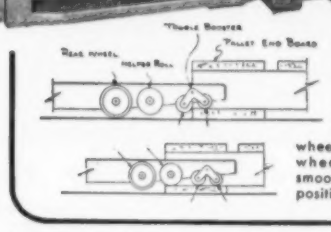
For further information write Dept. M-4

Executone

COMMUNICATION & SOUND SYSTEMS
415 Lexington Ave., New York 17, N. Y.

▲ Mention Item NED-9620 when writing ▲

NOW Handle Double-Faced Pallets EASILY with SERVICE LEVERLIFT



Magic "Toggle Booster" Lets Wheels Glide into Pallet Smoothly

See how "Toggle Booster" strikes edge of pallet, raising truck's rear wheels. Helper roll and rear wheels are able to glide smoothly through pallet into position.

Here is the only pallet truck with tines which can enter your double faced pallets with no jockeying. Magic "Toggle Booster" rollers "float" truck frame and wheels over bottom face of pallet so gently that even an empty pallet isn't jarred out of position. Leverlift enables you to use *all* floor space where it's too crowded to work power-operated equipment. Here is the easiest and quickest hand-operated way to move palletized loads. *Write for detailed specifications today.*

SERVICE CASTER & TRUCK CORP.

INDOOR MILES Made EASIER and SAFER

Executive Offices: Albion, Michigan
Plants at Albion, Michigan and Somerville 43, Mass.

See your Classified Telephone Directory

▲ Mention Item NED-9621 when writing ▲

provide the newest and only outstanding improvement in Flexible Shaft Machinery in 25 years. It's another Strand step forward in quality precision tools for faster, easier and more economical production work. The Strandflex 4-Speed gear drive employs a patented, new type of quick change gear drive utilizing 4 POSITIVE speeds by a unique and easy method of instantly changing from one speed to another. Powered with totally enclosed ball-bearing motors (having speeds from 850 to 9000 R.P.M., depending on motor) means years of smooth, trouble-free service. Send for Bulletin No. 43-A for full details.

Standard 3 speed counter shaft type Strand machines also available for portable rotary power at constant speeds for grinding, buffing, drilling, wire brushing and rotary filing, in all types and models from 1/8 to 3 H.P.—for every specific requirement. Send for Catalog No. 30.

Distributors in all principal cities

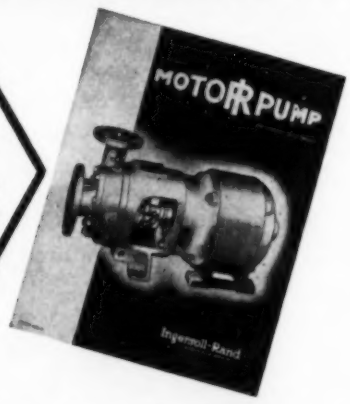
Strand **N. A. STRAND & CO.**
5001 NO. WOLCOTT AVE.
CHICAGO 40, ILL.

▲ Mention Item NED-9622 when writing ▲

National Pneumatic Co. 56
National Production Company 4
National Vulcanized Fibre Co. 17
Neff & Fry Company, The.. 24
Nelson, Herman, Corporation, The 42
New Jersey Machine Corp. .. 34
Nicholson, W. H., & Co. 27
Nicholson File Co. 42
Nobur Manufacturing Co. ... 21
Nolan Company, The..... 31
Norma-Hoffman Bearings Corp. 7
Norton Company 67
Nu-Matic Grinders, Inc. 5
Ohio Brass Company 17
Ohio Gear Company, The.... 70
Ohio Knife Co., The..... 36
Ohio Nut & Bolt Company, The 71
Ohio Tool & Engineering Co. 18
O'Neil Irwin Mfg. Co. 14
Orange Roller Bearing Co., Inc. 65
Oster Mfg. Co., The..... 22
Owens-Corning Fiberglas Corporation 22
Ozalid, Division of General Aniline & Film Corp. 33
Pacific Industrial Manufacturing Co. 60
Palnut Company, The..... 66
Pangborn Corporation 34, 51
Pannier Corporation, The.... 8
Paragon Spring Company ... 11
Parsons Engineering Corp... 12
Peerless Electric Company, The 14
Penn Metal Corporation of Penna. 42
Pereny Equipment Co. 45
Phillips Screw Manufacturers 31
Photoswitch, Incorporated .. 4
Pike, E. W., & Co. 46
Pittsburgh Steel Products Co. 50
Pneu-Trol Devices, Inc. 7
Power Equipment Company.. 2
Precise Products Co. 43
Progressive Mfg. Co., The... 22
Pyle-National Company, The. 25
Quality Hardware and Machine Div. Continental-United Industries Co., Inc. 64
R.B.M. Division, Essex Wire Corp. 59
Ransome Machinery Company Subsidiary of Worthington Pump & Machinery Corp.. 45
Rapids - Standard Co., Inc., The 59
Rauland Corp., The 57
Ready Power Co., The..... 35
Redmond Company, Inc. 6
Reliance Electric & Engineering Co. 39
Republic Rubber Div. Lee Rubber & Tire Corp..... 15
Revolvator Co. 14
Richards, J. A., Co. 42
Ric-Wil Company, The..... 24
Ridge Tool Co., The..... 24
Robbins & Myers, Inc. Hoist & Crane Div. 20
Roberts, Weldon, Rubber Co. 13
Robertson Manufacturing Company 52
Rockford Clutch Division Borg Warner 59
Rock-Tred Corporation..... 63
Rockwood Sprinkler Co. ...24, 55
Rodgers Hydraulic, Inc. 68
Rolock Incorporated 16
Ross Carrier Company..... 60
Ross Operating Valve Co.... 12
Rotary Lift Co. 41
Ruby Chemical Co. 24
Ruemelin Mfg. Co. 63
Ruthman Machinery Co., The 56
Sabin Machine Co., The..... 56
Sandy Hill Iron & Brass Works 36
Sanstorm Manufacturing Co. 16
Sarco Co., Inc. 50
Schrader's, A., Son Division of Scovill Mfg. Co., Inc..32, 65
Schramm, Inc. 37
Scovill Manufacturing Co. .. 32
Scully-Jones and Company.. 14
Sedberry, J. B., Inc. 63
Seiberling Latex Products Co. 28
Service Caster & Truck Corp. 69
Shakeproof, Inc. 40
Sheldon Machine Co., Inc.... 39
Shenango-Penn Mold Co. 60
Sheppard, R. H., Co., Inc... 48
Shoe Form Co., Inc. 14
Signode Steel Strapping Co.. 45
Simmons Fastener Corp. 68
Simonds Abrasive Co. 41
Simonds Machine Co., Inc... 40
Simonds Saw and Steel Co... 26
Sinclair-Collins Valve Co., The 42
Skinner, M. B., Co. 4
Sly, W. W., Mfg. Co., The.. 37
Smith, G. W., & Sons, Inc.. 63
Smooth-On Mfg. Co. 9
Soldering Specialties 56
Sommer Metalcraft Corporation 44
South Bend Lathe Works.... 40
Spencer Thermostat Co. 38
Spencer Turbine Company, The 71
Sperzel Company, The 48
Spray Engineering Co. 58
Spraying Systems Co. 67
Stackbin Corporation 19
Standard Locknut & Lockwasher, Inc. 58
Standard Pressed Steel Co.. .....9, 45, 64
Stanley Tools 29
Star Electric Motor Co. 4
Stearns Magnetic Mfg. Co... 72
Stephens-Adamson Mfg. Co..8, 9
Sterling Tool Products Company 62
Stonhard Company 71
Stow Manufacturing Co. 66
Strand, N. A., & Co. 69
Struthers-Dunn, Inc. 31
Sturtevant Mill Company ... 39
Sunnen Products Company.. 19
Sunroc Refrigeration Company 65
Superior Tube Company..... 9
Surety Rubber Co., The..... 6
Synthane Corporation 32
Syntron Co. 2, 47
Tal Bender, Inc. 71
Taylor & Fenn Co., The..... 65
Taylor-Winfield Corporation, The 66
Templeton, Kenly & Co. 10
Tennessee Coal, Iron & Railroad Company 64
Thermo Electric Mfg. Co.... 54
Thomas Truck & Caster Co.. 71
Toledo Pipe Threading Machine Co., The 60
Tomkins-Johnson Co., The... 44
Topflight Tape Co. 64
Torit Manufacturing Co. 14
Torrington Company, The... 61
Towmotor Corporation 48
Trindl Products, Ltd. 11
Triplett Electrical Instrument Co. 68
Tri-State Metal Products, Inc. 3
Truck-Man, Inc. 72
Ullman Products Corp. 2
United Electric Controls Company 29
United Laboratories, Inc. ... 2
United States Gauge Division of American Machine & Metals, Inc. 6
U. S. Steel Export Company. 64
United States Steel Subsidiaries 64
Universal Engineering Co.... 58
Upco Co., The..... 5
V. & E. Manufacturing Co.. 58
Valvair Corporation 8
Van Dorn Div. of Black & Decker Mfg. Co. 72
Varflex Corporation 7
Veeder-Root, Inc. 38
Vickers Incorporated Division of The Sperry Corp. 12
Victor Saw Works, Inc. 38
Viking Shear Company..... 9
Wagner Awning & Mfg. Co., The 69
Wallace & Tiernan Products, Inc. 70
Watlow Electric Manufacturing Company 66
Webb, Jervis B., Co. 7
Wedge Protectors, Inc. 13
Wehle Conveyor Company.... 62
Welding Equipment & Supply Company 60
Wellman Bronze & Aluminum Co. 10
Wells Manufacturing Corporation 10
West Bend Equipment Corp.. 10
West Disinfecting Company. 23
Westinghouse Electric Corporation 26, 43, 64
Weston Electrical Instrument Corp. 30
Wheeler Reflector Co. 7
Whistler, S. B., & Sons, Inc. 3
Whiting Corporation 34
Wiegand, Edwin L., Co. 4, 52
Wiggins, E. W., Inc. 64
Willson Products, Incorporated 13
Wilshire Power Sweeper Co.. 67
Wisconsin Motor Corp. 6
Wolverine Tube Division Calumet and Hecla Consolidated Copper Co. 68
Worthington Pump & Machinery Corp. 25, 62
Yarnall-Waring Company..23, 38

For Better PUMP PERFORMANCE...

start looking HERE



Here's the help you need in selecting the proper pump to improve liquid handling throughout your plant. You'll find complete information on Ingersoll-Rand MOTORPUMPS ranging in size from 1/2 to 50 h.p.; 5 to 1800 g.p.m.; 5 to 600 ft. head. Find out why these ruggedly built, compactly designed units will do your job better. Ask our nearest branch office for a copy of the MOTORPUMP CATALOG.

Ingersoll-Rand
11 Broadway, New York 4, N. Y.

308-9

▲ Mention Item NED-9623 when writing ▲

SPECIALISTS
CANVAS—FABRIC PRODUCTS

Filter Bags

This triple-lined cotton filter bag, used in the paint industry, (daily production over 1000 units) is another example of Wagner diversity and high production efficiency.

What are your requirements? Let Wagner's high production methods effect a savings for you. Send blueprint or specifications now for estimate.

BAGS: Anode Dust Arrester Filter
CONTAINERS: for your products
COVERS: Machinery Special Fitted
CURTAINS: Flameproof Storage Bin
TARPAULINS

Canvas, Fabric, Plastic Products of every description. Stock and to specification.

WAGNER CANVAS PRODUCTS

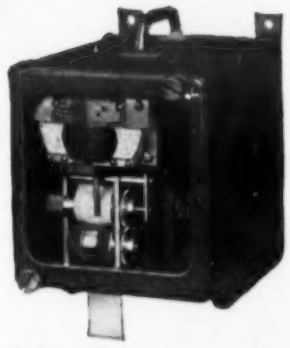
Main plant plus six manufacturing branches at your service.

THE WAGNER AWNING & MFG. CO.
"Specialists in Canvas products since 1865"
2662 SCRANTON RD. CLEVELAND 1, OHIO

▲ Mention Item NED-9624 when writing ▲

GE Cycle Recorder

FOR UNIFORM WELDING QUALITY BY ANALYSIS OF WELDING TIME



G-E inkless cycle recorder. Size, 5 1/2" wide by 7 7/8" high by 8 1/16" deep.

For consistent results on identical welds, current time must be uniform. The General Electric Cycle Recorder is designed to measure the time of current flow to permit thorough analysis. Test welds can be run for each job and the best time cycles chosen. Recorder can be used as a guide for setting welding machines as well as checking them after production starts.

INKLESS RECORDING SYSTEM

There's no ink to spill or smudge. A polarized reed vibrates in step with the current or voltage. It presses on a paper roll which goes over a graphite cylinder. The result is a clear, legible record of elapsed time. Just count the cycles.

Get more information on how this cycle recorder can help you have more uniform welds with less rejects. See your nearest G.E. Representative today. Or write for Bulletin GEC-216. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

GENERAL ELECTRIC

▲ Mention Item NED-9625 when writing ▲

MOTO-TRUCS

BUILT BY ORIGINATORS OF MOTORIZED HAND LIFT TRUCKS

OPERATE IN NARROWER AISLES

12-Volt Telescopic Hi-Lift Truck

SHORTER OVERALL LENGTH, SMALLER TURNING RADIUS.

Materials Handling Engineers prefer the Moto-Truc because—

IT REQUIRES LESS SPACE FOR OPERATION.

IT IS EASIER TO CONTROL. Easy grip roller type handle gives two speeds forward and reverse by an easy twist of the wrist on roller type control handle. Push buttons in ends of handle for lifting the load.

IT HAS FOUR-WHEEL LOAD SUPPORT and springs on drive unit for better traction.

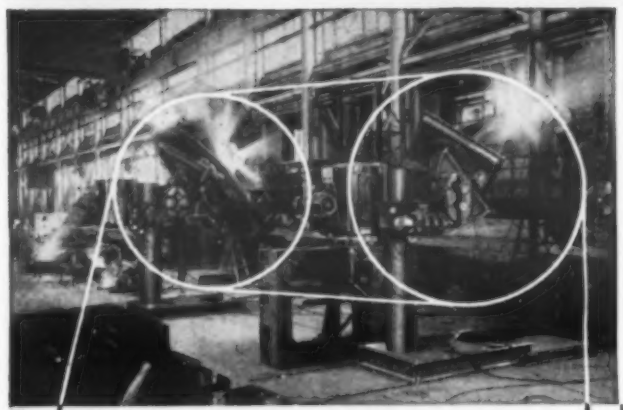
IT HAS 80" lift, is 66" in collapsed position and is 96" in overall height. 2,000 lb. capacity. Made to handle all standard size pallets.

THE LARGEST AND MOST COMPLETE LINE OF MOTORIZED HAND LIFT TRUCKS.

Write for BULLETIN 47-A

The MOTO-TRUC Company
1953 E. 59th St., Cleveland 3, Ohio.

▲ Mention Item NED-9626 when writing ▲



More WELDING going on here....

More welding and less time spent in flopping, propping up and crawling around weldments is the end result of the C-F Positioners in this welding department.

Mounted on C-F Welding Positioners, weldments can be quickly brought into position for a downhand pass — better, more uniform welds with resulting economies and production increases follow. Welders spend more time welding when they work with C-F Positioners because one "set-up" on the table allows them to maneuver the job without assistance, whether hand or power operated Positioners are used.

Power operated, variable speed C-F Positioners, with table rotation speeds in any range from 0 RPM and up, coupled with table tilt to 135° from the horizontal make them the logical choice for any production welding operation. Like all C-F Positioners, they have drilled tables for easy set-ups or tables can be quickly removed for installation of special fixtures or jigs. Write for Bulletin WP 24. CULLEN-FRIESTEDT CO., 1304 S. Kilbourn Ave., Chicago 23, Ill.

C-F positioned welds mean better, more economical welds

CULLEN-FRIESTEDT CO.
CHICAGO 23, ILL.

▲ Mention Item NED-9627 when writing ▲

NEWS FOR DESIGNERS!

Don't hesitate to specify long-lasting, corrosion-resisting fastenings of STAINLESS STEEL for ANY product! Anti-Corrosive's stock room carries more than 100 items, more than 7,000 sizes, ready to ship in all standard analyses. What's more, Anti-Corrosive's stockpile of raw material can fit your specifications in any analysis, any size.

Nuts, screws, bolts, nails, rivets, cotter pins, staples . . . for any size, for any purpose . . . do a better job for any product when they're made from Stainless Steel. Anti-Corrosive has been a pioneer in the Stainless fastening field since 1927 . . . and, today, is the nation's only firm producing Stainless Steel fastenings EXCLUSIVELY!

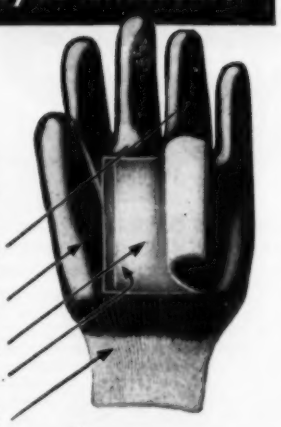
Write for free literature. Address Anti-Corrosive Metal Products Co., Inc., Castleton-on-Hudson, N. Y. In Canada, Railway and Power Engineering Corp., Ltd.

ANTI-CORROSIVE METAL PRODUCTS CO., INC.
63 RIVER ROAD, CASTLETON-ON-HUDSON, N.Y.

▲ Mention Item NED-9628 when writing ▲

Edmont GLOVES Last Longer • ...because they're different!

...the Glove for Industry!



Quality construction . . . Five features that guarantee comfort and extra wear on tough jobs!

1. Curved fingers molded in natural non-tiring position. Full size for "working hands".
2. Vulcanized outside Neoprene coating chemically welded to fabric.
3. Strong napped inner fabric.
4. Uniform narrow seams assure hand comfort.
5. Wrist shaped to fit snug and comfortable.

Available in knit wrist style illustrated, and 10", 12", and 14" gauntlets.

Comfortable . . . Flexible . . . Economical

For further information, samples and prices, see leading Distributors or write direct, briefly describing operation involved, materials handled and temperature conditions.

Edmont

See your SAFETY MILL or INDUSTRIAL SUPPLIER

Fabric Lined RUBBER GLOVES

Edmont Mfg. Co., 503 Orange St., Coshocton, Ohio

▲ Mention Item NED-9629 when writing ▲

NEW EQUIPMENT DIGEST

Registered U. S. Patent Office

MECHANICAL IMPROVEMENTS • INDUSTRIAL LITERATURE
NEW PRODUCTS AND MATERIALS

A. N. Gregg ..... Editor
E. E. Penn ..... Associate Editor
E. B. Pinkham ..... Associate Editor
John Henry ..... Advertising Manager
L. S. Hamaker, Jr. ..... Assistant Advertising Manager
J. W. Close ..... Circulation Manager

Main Office

Cleveland 13, Ohio ..... Penton Building

Advertising Representatives

F. O. Rice & Lloyd H. Weber — Penton Building, Cleveland 13
J. H. Robison & Wm. J. Lowitz — 520 N. Michigan Ave., Chicago 11
B. R. Baker — 16 E. 43rd St., New York 17
V. W. Volk (Philadelphia) — 225 Strathmore Rd., Havertown, Pa.
F. J. Fuller — 130 N. New Hampshire Ave., Los Angeles 4

New Equipment Digest is published monthly by Equipment Digest Publishing Co., Penton Building, Cleveland, Ohio; G. O. Hays, President; J. R. Dawley, F. O. Rice, J. H. Robison, Vice Presidents; E. L. Shaner, Treasurer; E. L. Werner, Secretary

Publisher's Notice

We assume no responsibility for the validity of claims in connection with items appearing in the New Equipment Digest. Addresses are given to facilitate further inquiry. Copyright 1948 by Equipment Digest Publishing Co.

Circulation Audited by CCA

December, 1948

Index to Products

A

Abrasive Products 13, 15, 18, 25, 39, 41, 52, 59, 67
Alloys, Special Purpose....37, 63

B

Balancing Machines 22
Battery Charger 2, 19
Bearings; Ball, Roller & Thrust 3, 7, 9, 55, 65
Bearings, Bronze 43, 49
Bearings, Fabric 31
Bearings; Plain, Collar-Oiling 36
Belt Fasteners 66
Belting 2, 53
Bender 71
Bins & Boxes, Parts....9, 14, 19
Bins & Silos, Storage..... 24
Boxes & Crates, Wooden.... 33
Brakes, Magnetic 72
Brazing Materials.....13, 37, 65
Broaching Equipment 17, 43
Buckets, Crane 30
Bushings, Drill 58
Buying Guide 12

C

Calendar 15
Canvas Products 69
Car Door Opener 31
Casters 52, 59, 68, 71
Castings 10, 65, 66
Castings, Centrifugal 60
Cements, Repair 9, 59
Chains 26, 60
Chucks 16, 33
Chucks, Collet 14
Clamping Devices 2, 8, 38
Cleaners, Air 5, 31, 35
Cleaners, Drain 18
Cleaners, Hand 23, 57, 58
Cleaners, Tube 39
Cleaners, Vacuum 23, 26, 71
Cleaning Equipment, Blast.. .....16, 32, 34, 37, 40, 46, 51
Cleaning Machines 20, 62, 66
Cleaning Machines, Parts.... 24
Clutches 59
Coatings, Protective 62
Collars 9
Communications Equipment.. .....12, 57, 69
Compressors, Air 23, 25, 27, 37, 39, 55, 62
Computer, Electronic 11
Condensation Preventive 72
Conduit Pipe Systems..... 24
Connectors, Electric 20, 40
Controls, Electric 6, 18, 25, 33, 35, 40, 52, 59, 61, 62
Controls, Hydraulic 3, 12, 23, 25, 32, 42
Controls, Level 4, 8, 38
Controls, Pneumatic 7, 8, 19, 29, 32
Controls, Pressure 2, 51, 56, 62, 63
Controls, Production 54
Controls, Remote 21
Controls, Temperature 4, 10, 29, 46, 61, 62, 63
Conveyor Accessories...16, 47, 54
Conveyors, Belt 13, 36, 37, 40, 55, 61
Conveyors, Chain 62
Conveyors, Pneumatic 48
Conveyors, Roller.....4, 43, 44
Conveyors, Wheel.....6, 8, 44
Counting Devices 38
Couplings, Flexible.22, 28, 54, 60
Cranes 16, 38, 43, 54
Cubicles, Instrument 8
Cylinders, Air & Hydraulic.. .....10, 18, 31, 44, 52

D

Deburring Equipment...9, 21, 34
Dies 20, 64
Dies, Adjustable 3
Door Operator.....32, 49, 59
Doors, Industrial 59
Drafting Equipment 34, 58
Drill Heads, Adjustable..... 18
Drilling Machines 13
Drills 8, 67
Drives, Machine 46
Drives, Variable Speed 1, 4, 12, 25, 27, 39, 46
Duplicating, Dieless 14
Dust Collectors 12, 14, 17, 29, 33, 39, 67

E

Electric Plants 65
Electrical Equipment 64
Electronic Equipment 19
Elevating Equipment 6, 10, 14, 17, 27, 41, 44, 52
Engines, Diesel 48
Engines, Gasoline....1, 6, 13, 63

F

Fans & Blowers....23, 43, 64, 67
Fastening Devices.3, 8, 17, 19, 20, 22, 25, 26, 31, 35, 36, 40, 45, 49, 50, 53, 56, 57, 58, 64, 66, 68, 70
Feeders 23
Feeders, Stock 7, 61
Feeders, Vibratory 47
Felt Products 25, 30
Files 42, 65
Filing Machines 29
Filtering Equipment.....14, 36
Finishes 58
Finishing Equipment, Spray. 15, 19, 33, 43, 61, 62
Fire Extinguishing Equipment 34, 55
Flexible Shaft Machines..... .....27, 51, 66, 69
Floor Machines 67
Floor Resurfacers....2, 5, 63, 72
Flooring Materials 39, 64
Fluxes 15, 24
Forming Machine, Metal.... .....17, 22, 72
Furnaces, Industrial 41, 45, 53, 54
Fuses 32

G

Gages, Precision.....11, 50
Gages, Pressure & Temperature.....6, 37, 49, 65, 66, 70
Gearing.....3, 20, 43, 62, 70
Gloves, Industrial 6, 67
Gloves, Neoprene 28, 70
Goggles 13
Grinders, Tool & Cutter..... 44
Grinding Accessories.....5, 67
Grinding Machines..10, 18, 29, 45

H

Hardware 65
Heat Exchangers 68
Heaters, Electric 5, 52
Heaters, Induction 28
Heaters, Unit 1, 38, 42, 46, 49, 51, 56, 62
Heaters, Water 41
Heating Equipment 66
Hoists.....32, 34, 39, 50, 59
Holloware, Fiber 38
Honing Equipment 19
Hose & Fittings.....13, 15, 48
Hydraulic Equipment 72

I

Indicators, Pressure & Temperature 12
Infrared Equipment 4, 24
Inspection Equipment 2, 33, 46, 47, 48, 60, 61, 66
Insulation Electric 7, 17, 22, 58, 59
Insulation, Thermal 57

J

Jacks 10, 43
Jacks, Leveling 61
Jigs & Fixtures..... 64
Joints, Swing 28

K

Knives & Blades 26, 36

L

Labeling Equipment 66
Labels 5, 44

We're Looking for Low Pressure Measuring Problems

If you have a problem in measuring low pressure, we'd like to hear about it. Accurately measuring low pressure is our business and we think we could satisfy your needs with one of our wide line of sensitive pressure measuring instruments — as for example, the W&T Precision Low Pressure Gauge—combined with our extensive experience in the field of precise pressure measurement.

The Low Pressure Gauge, already used in such widespread fields as aircraft flight testing, liquid level measurement, and gas burner installations, is custom calibrated and easily installed.

Here are some of its major features:

Accuracy: 1 part in 300
Sensitivity: 1 part in 500
Available in ranges from 0-10" of water to 0-400" of water
Measures differential pressure
Unaffected by gravity
Equipped with expanded scale if desired

Write today and tell us about your problems in measuring low pressure—we'll be glad to help. A-72

WALLACE & TIERNAN PRODUCTS, INC.
ELECTRICAL MECHANISMS AND PRECISION INSTRUMENTS
Belleville 9, New Jersey • Represented in Principal Cities

▲ Mention Item NED-9630 when writing ▲

OHIO SPECIAL GEARS

TO FIT YOUR PARTICULAR NEEDS

Whether the gears you specify are simple or complex, you'll find that Ohio Special Gears fit your specifications in every detail. For more than a quarter century Ohio Gear engineers and craftsmen have had an unexcelled reputation for turning specifications into power transmission components of highest industrial quality.

Ohio Special Gears include Spur, Bevel, Miter, Helical and Spiral Gears, Worms and Worm Gears, Sprockets, Spline Shafts and other allied products.

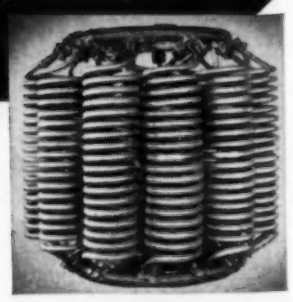
We will be glad to assist in your gear production problems and to quote on your specifications.

ESTABLISHED 1915
The OHIO GEAR Co.
1320 E. 179th St.
CLEVELAND 10, OHIO

OHIO GEARS

▲ Mention Item NED-9631 when writing ▲

pipe coils to your needs from CRANE



17 coils in one —completely fabricated by Crane.

in most materials types and sizes

No source is better equipped with experience, machinery and manpower to fabricate pipe coils to your precise requirements.

Large or small . . . simple or complex . . . no pipe coil design is too unusual for Crane Shops. Crane Co.'s wide experience includes coiling such tubular materials as carbon steel, wrought iron, copper, brass, nickel, and various types of stainless steel. Ask your Crane Representative . . . or write . . . for a copy of Crane Pipe Coil Catalog 318—a handy source of helpful information for designers and buyers.

CRANE CO., 836 S. Michigan Avenue, Chicago 5, Ill.
Branches and Wholesalers Serving All Industrial Areas

CRANE *Everything for Every Piping System*

VALVES • FITTINGS • PIPE • PLUMBING AND HEATING

▲ Mention Item NED-9632 when writing ▲

THOMAS TRUCK of Keokuk

Heavy Duty TRUCK CASTERS

- Double Ball Bearing Swivel
- Smooth face metal or Rubber Wheels
- Bolt and Sleeve Axle
- Hardened Steel Balls

easy spinning and rolling features these husky Thomas truck casters. Side thrust is carried by the small row of balls against the solid part of top plate. All castings of strong semi-steel, designed for floor truck service. Ribbed forks. Grease gun fittings. Write for catalog.

THOMAS TRUCK of Keokuk

Rubber Wheels for FLOOR TRUCKS

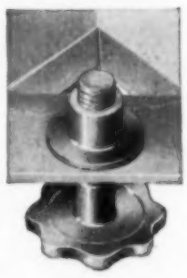
- Easy rolling tires — resilient tread
- Prevent floor damage
- Molded-on type—long life
- Strong one-piece wheel casting

replace worn, rough floor-damaging wheels with soft, resilient rubber wheels that roll quietly and easily over all kinds of floors, saving time and effort, reducing breakage. Write for catalog.

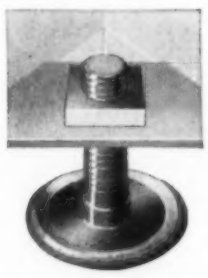
Representatives in all principal cities.
Write for Trailer Catalog

THOMAS TRUCK & CASTER CO.
3255 MISSISSIPPI RIVER, KEOKUK, IOWA
Mention Item NED-9633 when writing

OHIO Adjustable FEET



Type FS has scallop rim. Cut shows application with Foot screwed into Ohio Flanged Weld Nut.



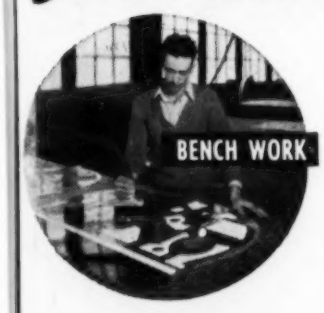
Type FR has solid rim. Cut shows usage with Ohio Square Weld Nut.

Non-skid feet are made to order. Cut shows slotted end. These are also available with square end.

Send for Bulletin 483!

THE OHIO NUT & BOLT COMPANY
608 Front St. Berea, Ohio
Mention Item NED-9634 when writing

WHY MAINTENANCE WITH SPENCER VACUUM *Costs Less—*



A powerful vacuum with easily emptied dirt containers of ample capacity cleans floors, walls and overhead structures faster and better. Equipment maintenance is reduced by keeping it clean inside and out with special vacuum tools which do not allow the dirt to spread.

Spencer is also useful on assembly lines, to remove chips and dust, to reclaim materials, to clean before painting, and to clean the finished goods before packing.

Industrial sizes from 1½ to 100 H.P., portable or stationary. Tools and hose for every purpose.

Ask for the bulletins.

1½ H.P. Portable

333G

SPENCER VACUUM CLEANING
HARTFORD
THE SPENCER TURBINE COMPANY, HARTFORD 6, CONN.
Mention Item NED-9635 when writing

Products Index—Continued

Laboratory Equipment 39
Ladders 57
Laminated Materials 41, 54
Lapping Machine 11
Lathes.....23, 39, 40, 62, 66
Legs, Leveling 7, 71
Lighting Equipment....7, 51, 55
Lockers & Shelving.....3, 42, 72
Locks 37
Lubricants 19, 55
Lubricating Equipment 26

M

Machine Tool Accessories 7, 9, 33, 41, 63
Magnetic Equipment 10, 29
Maintenance Materials 71
Marking Equipment.8, 33, 57, 58
Masks, Adhesive.....14, 64
Materials Handling Equipment..... 5, 15, 35, 36, 37, 38, 40, 48, 50, 57, 62
Materials Handling, Overhead 1, 18, 20, 46, 49, 67
Mats, Floor 24, 36, 63
Metal Blackening 66
Meters, Flow 60
Meters, Tong Tests..... 15
Milling Machines 62
Mills, Hammer 63
Molybdenum Alloys 6, 60
Motors, Electric 4, 6, 14, 26, 30, 37, 38, 45, 50, 65, 71

N

Nozzles 67

O

Office Equipment.....38, 47, 63
Ovens, Industrial 67

P

Packaging Equipment 35
Partitions, Woven Wire..... 10
Parts, Precision 61
Pipe Fabricating Equipment. 15
Pipe & Fittings 5, 27, 30, 32, 56, 64, 70
Pipe Joint Compound..... 37
Pipe Tools & Machines.22, 24, 60
Plastics.....13, 23, 30, 32
Plate Lifters 5
Plating Equipment 59
Polishing Equipment 16
Power Units, Hydraulic....42, 63
Power Units, Industrial Truck 35
Press Actuator 56
Press Brake 12, 60, 63
Press Control 1
Presses, Hydraulic..... .....15, 22, 46, 61, 64, 67, 68
Presses, Punch 31, 54, 58
Presses, Stamping 65
Process Equipment 17, 63
Production Facilities 61
Protectors, Motor 38
Pulsation Dampener 41
Pumps 7, 34, 39, 41, 43, 47, 55, 58, 61, 66, 67, 69
Pumps, Coolant 56
Pumps, Vacuum 34
Punches 20
Pyrometers.....9, 25, 45, 48, 62

R

Recorders, Pressure & Temperature 5
Recorders, Sound 52
Reels, Cord 1
Reels, Hose 57
Reels, Stock 53
Refractories 65
Regulators, Voltage....40, 49, 51
Relays 18, 31, 62
Reproduction Equipment ... .21, 33, 49, 52
Resistors 41
Respirators 8, 49, 50
Riveting Equipment 61, 67
Rivets, Blind 20, 22
Rolls 52
Roofing Materials 2, 63
Rubber Products 60
Rubber, Synthetic 31
Rules, Tape 11

S

Safety Equipment 29, 57
Saw Blades 15, 38
Saw Sharpener 23, 35
Saws, Metal Cutting.10, 16, 46, 65
Saws, Wood 4, 66
Scales 23, 54
Screwdriver 29
Screwdriver, Power 47
Sealing Compounds 59
Seals.....2, 11, 35, 55
Shades, Window 44
Shapers 27
Shears 9, 44, 62
Shims 57
Shop Equipment...18, 21, 33, 34
Shredders 36
Snubbers, Diesel Engine..... 47
Solders 51, 56
Solenoids 29, 35
Speed Reducers.....30, 54, 60
Spray Equipment 58
Springs 11, 18
Sprockets 3, 20
Stampings 48
Stitcher, Wire 61
Strapping, Steel 45

T

Tacker, Hand 28, 35
Tachometers 1, 62
Tape Dispenser 22
Tape, Industrial 64
Tapping Machines..16, 50, 64, 67
Telephone Booths, Accoustic. 22
Testing Equipment 2, 17, 20, 42, 46, 53, 68, 72
Thermometers 20, 56
Tires, Industrial 2, 25
Tools, Boring 10, 65, 68
Tools, Carbide 42, 53
Tools, Cleaning 11
Tools, Cutting 37, 67
Tools, Hand 45, 53
Tools, Milling 26
Tools, Pneumatic 26, 45
Tools, Portable Electric 5, 7, 12, 19, 43, 52, 62, 65, 72
Tools, Soldering 13
Tractors, Industrial 7, 26
Tractors, Hoist 53
Traps, Steam.....27, 31, 47, 50
Trolleys 3, 7, 41
Truck Bodies, Dumping...16, 28
Truck, Hand 12, 16, 20, 54, 56, 57, 65, 69
Trucks, Industrial Power ... .14, 20, 28, 30, 36, 47, 48, 51, 54, 60, 63, 67, 69, 71, 72
Tubing & Fittings.....9, 32, 55
Tubing, Flexible Metal..... 64

V

Valve Reseater 4
Valves.....17, 24, 44, 67
Vibration Absorbers 66
Vises 21, 30, 51

W

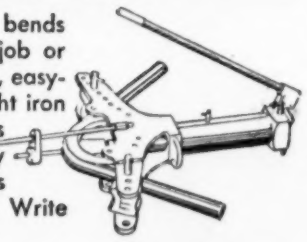
Washroom Equipment 21, 48
Water Cooler 65
Water Treatment 27, 28
Welders, Electric...11, 34, 64, 66
Welding Accessories..3, 4, 11, 13, 14, 21, 40, 45, 60, 63, 65, 69, 70
Wheels, Industrial 5, 71
Wire Cloth & Screens..... 27
Wire Rope & Accessories...4, 59
Wire Specialties 44
Wiring Accessories...6, 8, 10, 50
Woodworking Machines 9
Wrenches .....[illegible], 29, 34, 53

For Installation or Repair
A Portable

Tal Bender

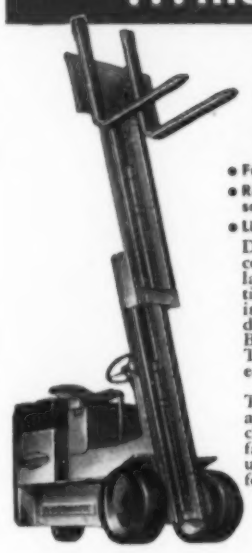
— with new *bend* indicator —

Anyone can make perfect bends with a Tal machine, on-the-job or in-the-shop. This fast working, easy-to-operate bender for wrought iron or steel pipe does in minutes work that otherwise takes many hours. No wonder thousands are in service everywhere. Write today for factual bulletin.



Tal Bender, Inc. Dept. 4 Milwaukee 2, Wis.
Mention Item NED-9636 when writing

NOW! for the first time... A RIDING TYPE STACKER ...the Transrider



- Rider operated
- Drive on the load wheels
- High pressure hydraulics
- Automotive type controls, including foot brake and foot accelerator
- Dead-man control
- Full contactor control
- Road clearance ample for boxcar loading and severe ramp conditions
- Lifts, tilts, and drives simultaneously

Despite its reduced cost, the Transrider incorporates the most desirable features of the larger famous Skylift trucks, and at the same time, gives you the economical operation, inexpensive maintenance and established dependability of the Transporter series. Batteries are interchangeable with the Transporter series, and no new charging equipment is necessary.

With a telescopic lift mechanism, the Transrider raises load to 130 inches, with an overall height of only 83 inches for clearance through standard boxcar and factory doors. Single lift, before telescopic uprights are extended, is 66 inches. Write for catalog.

AUTOMATIC TRANSPORTATION CO.
Div. of The Yale & Towne Mfg. Co.
61 W. 87th St., Dept. X-8
Chicago 20, Ill.

Transrider
A PRODUCT OF AUTOMATIC
Lightens LIFE'S LOADS

Mention Item NED-9637 when writing

SPECIAL MOTORS for SPECIAL JOBS!

Get *"Dependable Power"*
WITH CUSTOM-BUILT DOERR MOTORS!

■ Although we have been building standard fractional H. P. motors for years, the majority of our production is taken by manufacturers whose basic product design or end-use requires special features. We are providing such service to many leading names in industry, and would be pleased to consult with you on your motor design problems.

Write for Catalog and Prices • 52 No. Third St., Cedarburg, Wis.

From 1/20 to 2 H. P.

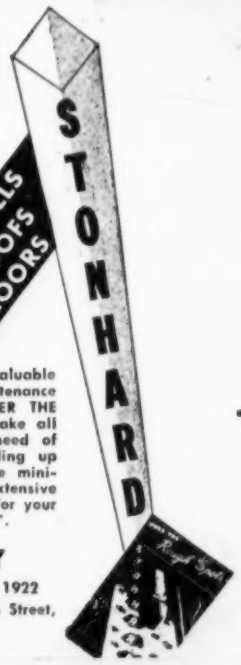
DOERR MOTORS

ELECTRO MACHINES, INC.
Standard or Designed to Your Specifications

Mention Item NED-9638 when writing

FREE *a helpful guide on* BUILDING MAINTENANCE

WALLS ROOFS FLOORS



You will find this new 48 page booklet invaluable as a guide to any of your building maintenance problems—from foundation to roof. "OVER THE ROUGH SPOTS" will show you how to make all your repairs—simply . . . without the need of skilled labor—quickly . . . without holding up production—and economically . . . at the minimum cost. Before you undertake any extensive building repairs—it will pay you to send for your FREE copy of "OVER THE ROUGH SPOTS".

STONHARD COMPANY
Building Maintenance Materials Since 1922
101 Stonhard Building, 1306 Spring Garden Street, Philadelphia 23, Pa.

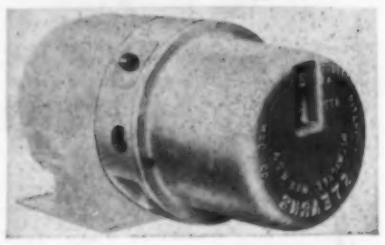
Send for your FREE

STONHARD COMPANY
101 Stonhard Building, 1306
Philadelphia 23, Pa.
Please send me a FREE
Firm .....
Mr. .....
Address .....
City .....

Mention

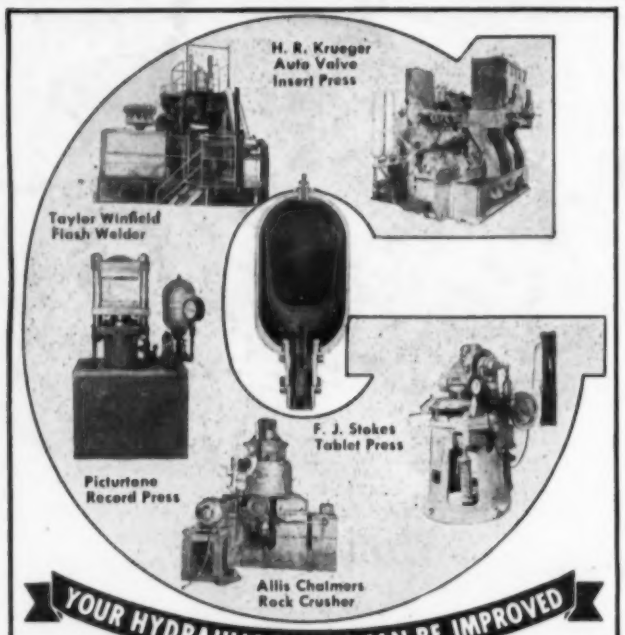
HERE IT IS! the new Stearns MAGNETIC fractional H.P. DISC BRAKE

for 1/6 1/4 1/3 1/2 3/4 Horsepower



For AC or DC current . . . motor or floor mounting . . . continuous or intermittent duty . . . horizontal or vertical operation . . . simple design, high efficiency . . . housing quickly removed without disturbing operating parts . . . lining wear indicator . . . easy to adjust . . . has Stearns Magnetic know how . . . Write for Bulletin 605-6X.

STEARNS MAGNETIC MFG. CO.
653 S. 28th St., Milwaukee, Wis.
SEPARATORS • CLUTCHES • PULLEYS • DRUMS • MAGNETS
Mention Item NED-9640 when writing



YOUR HYDRAULIC SYSTEM CAN BE IMPROVED

WITH A GREER HYDRAULIC ACCUMULATOR

No matter what your process or machine is used for, be it for making pills or automobiles, crushing rocks or welding huge steel rods, or pressing phonograph records, you will find it highly profitable to use a Greer Accumulator.

This accumulator will improve the efficiency and operation of any hydraulic system or device.

SIZE-2 cubic inches to 10 gallons—PRESSURE-Up to 3000 PSI

Get complete details by writing now for "Booklet on Accumulators." It's yours for the asking.

SEE OUR EXHIBIT NOV. 29 - DEC. 4, N. Y. POWER SHOW

GREER HYDRAULICS INC.
454 EIGHTEENTH STREET, BROOKLYN 15, N. Y.
Mention Item NED-9641 when writing

3 HANDEES COVER the FIELD

TOOLS OF 1001 USES
Grind, Drill, Polish, Engrave, Cut, Clean, Saw, Carve, etc.

For work on metals, alloys, wood, plastics, stone, horn, bone, etc. Plugs in any AC or DC socket.

HANDEE 44—a good production tool. Has everything—speed, power, versatility, pencil-point precision. Constantly cooled by forced air, the 44 runs cool and smooth all day long. Weighs 2 lbs. 8½" long. 20,000 r.p.m. $31.50. In case with accessories $42.50.

HANDEE HI-POWER—A big fellow with ample power to drive a 2½" diam. wheel. Weighs 3 pounds. 10" long. 17,000 r.p.m. In case with accessories $42.50.

HANDEE—First tool of this type and today's finest. For precision work. Weighs 12 oz. 6½" long. 25,000 r.p.m. With 7 accessories $20.50. In case with 40 accessories $27.50.

Handee Tools are in stock in principal industrial areas.

CHICAGO WHEEL & MFG. CO.
1101 W. Monroe St., Dept. NE, Chicago 7, Ill.

CHICAGO WHEEL & MFG. CO., 1101 W. Monroe St., Dept. NE, Chicago 7, Ill.

☐ 44

.....

.....

when writing

SHEET-METAL FORMER

Standard drive cleats and S-cleats shown in illustration are produced readily in sheet metal with this Cleatformer. Used extensively in metal fabrication and for ductwork, machine produces 8-foot seam or cleat in approximately 20 seconds. Hem thus formed on edge of sheet metal imparts considerable stiffness and permits use of light gage material without loss of strength or rigidity. Made by **Lockformer Co.**, 4613 W. Roosevelt Rd., Chicago 50, Ill.

Mention Item NED-9643 when writing

RADIATION COUNTER TUBE

Uniform and reproducible characteristics, plug-in base for watertight probe or chassis mounting and ribbed walls for mechanical strength are features of this Thyrode 1B85 aluminum beta-gamma counter tube. It is designed for use in laboratory and field radiation-measuring instruments. Operating at 900 volts, it has plateau length of not less than 200 volts, and plateau slope does not exceed 3 per cent per 100 volts. Nominal recovery time is 100 micro-seconds. Made by **Victoreen Instrument Co.**, 5806 Hough Ave., Cleveland 3, O.

Mention Item NED-9644 when writing

PORTABLE CHECKROOM RACK

Portable Checkerette checkroom rack provides 32 coat hooks and two 4-foot hat shelves. Unit can be set up in less than 1 minute without using nuts, bolts or tools. In addition, it can be assembled with hanger bar and hat shelves either at standard height or in higher or lower position. When not in use, rack can be stored in minimum of space. Made by **Vogel-Peterson Co.**, 624 S. Michigan St., Chicago 5, Ill.

Mention Item NED-9645 when writing

INDUSTRIAL NoDrip

COVER PIPES TANKS, WALLS

Anyone can brush, trowel or spray NoDrip on any clean, dry surface. Goes on like plaster, forms a seamless, protective coating, STOPS CONDENSATION DRIP.

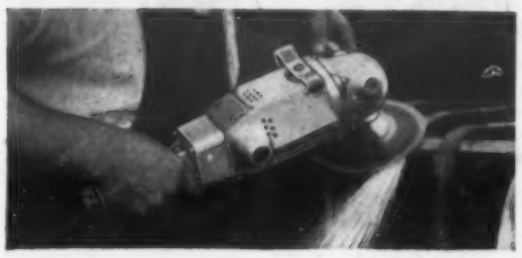
NoDrip keeps equipment and floors safe and dry; prevents corrosion of metal and prolongs its life. Acid, alkali and brine resistant. Comes in 1, 5 and 55 gal. drums, ready for use.

TRY NoDRIP—Apply NoDrip to a small area, compare the results with uncovered portions

Send for NoDrip Handbook

J. W. MORTELL CO.
526 BURCH ST. KANKAKEE, ILL.
Mention Item NED-9646 when writing

Finer Engineering means Faster Surfacing with . . .



VAN DORN SANDERS!

From switch to spindle, powerful Van Dorn Electric Sanders are built to take it! Motor, gears, bearings, spindle, all are built for years of productive service on the toughest surfacing jobs. And Van Dorn Sanders are so versatile they'll speed up job after job in your plant—from sanding any surface or grinding down welds to removing rust or shaping lumber. See your nearby Van Dorn Distributor for details. Write for free catalog to: The Van Dorn Electric Tool Co., 762 Joppa Road, Towson 4, Md.

For Power Specify "Van Dorn"
(Div. of Black & Decker Mfg. Co.)
Portable Electric TOOLS
Mention Item NED-9647 when writing

$850 F.O.B. Jackson, Mich.

Trade DEAD Weight for PAY Weight with truck-man pallet toter

Stop costly horizontal material movement with hand trucks and heavy stacking forks. The answer? The NEW Truck-man Pallet Toter—PAYload over 3000 lbs., weight 920 lbs. The dependable Truck-man Power Turret famous for easy handling and economy. Numerous advantages, including:

• Powerful Wisconsin Model AB Engine—power to spare at low cost
• Unbroken efficiency—no costly charging equipment or lay-ups
• Rubber insert load wheels, pneumatics for driver comfort and traction
• Balanced design, heavy welded construction, fit for hard service

This big horizontal mover—no "extras"—only $850, f.o.b. Jackson—and—the OPERATOR RIDES. Write for Model DF Bulletin or name of distributor in your area—or ASK ANY OPERATOR!

truck-man, inc.
1414 W. Ganson Street Jackson, Michigan
Mention Item NED-9648 when writing

NEW PLASTIC FLOOR PATCH SETS INSTANTLY

TAMP SMOOTH! TRUCK OVER!

Use durable INSTANT-USE . . . a tough, plastic material which you simply shovel into hole—tamp—and run traffic over immediately. NO WAITING. Bonds tight to old concrete. Makes smooth, solid, heavy-duty patch. Withstands extreme loads. Keep a drum on hand for emergencies. Immediate shipment.

REQUEST DESCRIPTIVE FOLDER and TRIAL OFFER DETAILS

INSTANT-USE

FLEXROCK COMPANY
3603 Filbert St., Philadelphia 4, Pa.
Offices in Principal Cities
Please send me complete INSTANT-USE information and details of TRIAL ORDER PLAN—no obligation.
Name .....
Company .....
Address .....

Mention Item NED-9649 when writing